

CITY OF CALABASAS GENERAL PLAN

COMMUNITY PROFILE

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CITY OF CALABASAS GENERAL PLAN

COMMUNITY PROFILE

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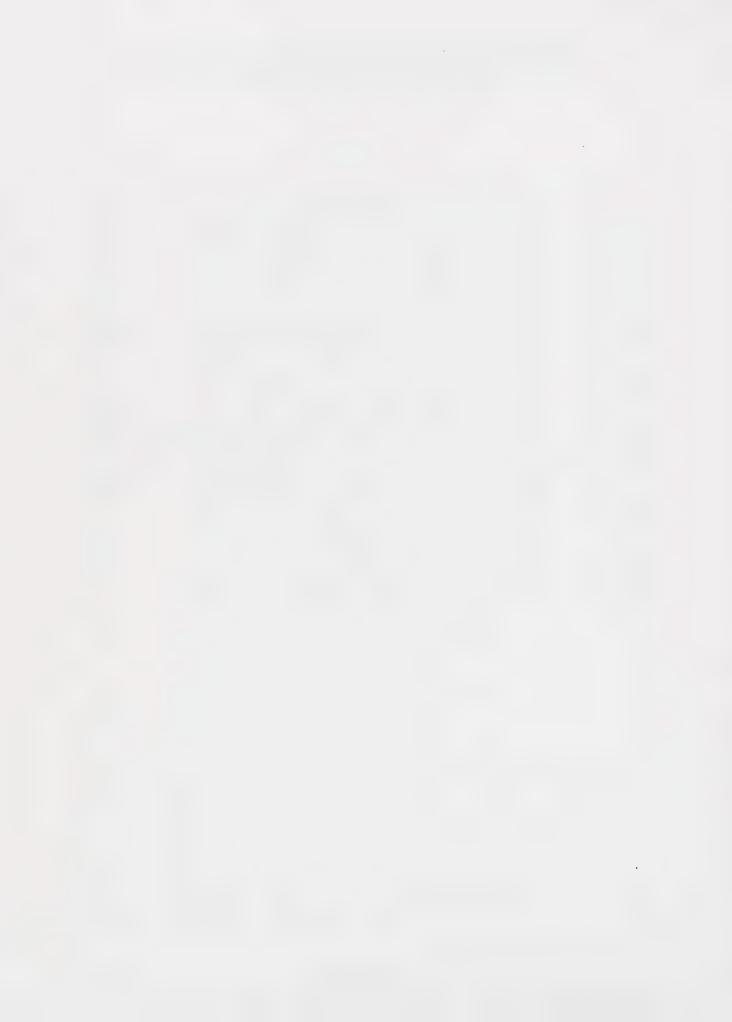
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INTRODUCTION



I. INTRODUCTION

The City of Calabasas is located in Los Angeles County, approximately 25 miles from downtown Los Angeles (see Figure I-1). Neighboring cities include City of Los Angeles Agoura Hills and Hidden Hills. In addition, a portion of the City's northern boundary borders the Ventura County line.

As of 1993, the City of Calabasas incorporated boundaries encompassed approximately 12.9 square miles, or 8,269 acres of land. The City of Calabasas presently has an approved general plan study area occupying 19.0 square miles, or 12,186 acres, beyond its City limits, primarily north and south of the City (see Figure I-2). Regional access to the City is from the Ventura Freeway (Highway 101).

The Calabasas General Plan: Community Profile report is one of four documents that chronicles the City's General Plan Program. These four documents include:

- The Calabasas General Plan: Community Profile report presents the research material necessary to understand the physical, natural, and economic environments of the City of Calabasas and meets the data and analysis requirements outlined in the State General Plan Guidelines.
- The Calabasas General Plan: Community Issues report defines significant issues and identifies community needs and desires. It acts as the groundwork for the City's General Plan program, clarifying the issues to be addressed and identifying alternative policy choices. It is the product of a series of in-depth interviews with local officials, a Visioning Charette, a citywide workshop, a community attitude survey, and the concerns voiced by the City's General Plan Advisory Committee. The document also includes a summary of community characteristics. The Calabasas General Plan: Community Issues report documents the City's General Plan community participation program required by State planning law.
- The Calabasas General Plan: Policy and Strategy document clearly outlines the vision which Calabasas has for its future and the policies and strategies it intends to follow in pursuit of that vision. It is a comprehensive policy document, identifying general issues and providing clear policy guidance. The report also presents specific actions or strategies designed to implement the City's goals, objectives, and policies. For each strategy, the agency responsible for implementing the action, the funding source, and the timing are identified. The policies in the Calabasas General Plan: Policy and Strategy document meet the development policy requirements described in the State General Plan Guidelines. The policies themselves will also function as the mitigation measures for the EIR on the Calabasas General Plan. The strategies outlined in the Calabasas General Plan: Policy and Strategy document meet the implementation requirements of the State General Plan Guidelines and together act as the mitigation monitoring program for the Calabasas General Plan EIR.



GENERAL PLAN

FIGURE 1-1

REGIONAL LOCATION MAI



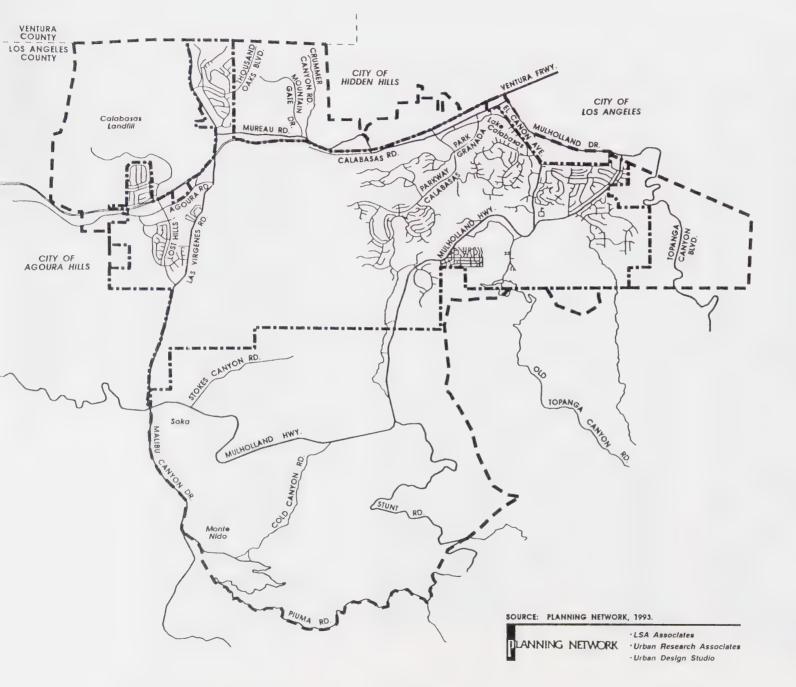


LOS ANGELES COUNTY BOUNDARY

SOURCE: PLANNING NETWORK, 1993.

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- LSA Associates
- Urban Research Associates
- Urban Design Studio





CITY OF CALABASAS GENERAL PLAN

FIGURE 1-2 STUDY AREA

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE





The Calabasas General Plan: Environmental Impact Report and Master Environmental Assessment provides the means for examining the implications of future growth and change in the City. It includes a summary of existing conditions and functions as a program environmental impact report for the General Plan. To complement the EIR, the General Plan goals and objectives presented in the General Plan Policy and Strategy document are written in a manner that will function as the standard by which the significance of impacts may be evaluated.

A. RELATIONSHIP TO THE CALIFORNIA GENERAL PLAN GUIDELINES

ROLE OF THE GENERAL PLAN

The Calabasas General Plan documents were prepared in conformance with the 1990 State of California General Plan Guidelines. According to these guidelines, the role of a general plan is to:

"... act as a 'constitution' for development, the foundation upon which all land use decisions are to be based. It expresses community development goals and embodies public policy relative to the distribution of future land use, both public and private."

The guidelines also recognize that a general plan must be based on hard data if it is to be the primary source of community planning policy. The Calabasas General Plan: Community Profile document presents a comprehensive description of the City. Summarized in the Calabasas General Plan: Community Issues document, this background information, along with the concerns of the local decisionmakers and residents, is used to clarify the issues and to define program options. In the Calabasas General Plan: Policy and Strategy document, this information becomes the basis for policies and implementation measures that will address local concerns and provide clear direction for the future development of the City.

CHARACTERISTICS OF THE GENERAL PLAN

The State General Plan Guidelines not only define the role of a community's general plan, but they also describe basic characteristics of a general plan. As part of the City's General Plan, the Community Profile report must be both comprehensive and internally consistent. In addition, it must act as a long-term planning tool and establish development policy for the community. How the Calabasas General Plan: Community Profile document complies with these requirements is described below.

The General Plan must be comprehensive. The State defines comprehensiveness in two ways: the physical area the plan covers and the issues the plan addresses. Geographic comprehensiveness means that the General Plan must cover all territory within the community's boundaries, and any land outside its boundaries which, in the planning agency's judgement, bears relation to its planning. For cities, this means all areas within the city limits and generally all lands within a city's sphere of influence. The General Plan study area for the City of Calabasas is shown in Figure I-1. It includes not only the City's existing city limits but also a larger area that the City identified in the Foundation Planning Document for the City of Calabasas as the future sphere of influence and is referred to as the General Plan study area.

The second way that the State defines comprehensiveness is by examining the range of issues that the General Plan addresses. A community's plan must address not only the seven elements required by the State, but it must also consider other issues affecting the community. Comprehensiveness and how it relates to the Calabasas General Plan documents is further defined in the discussion of State mandated general plan elements.

- The General Plan must be internally consistent. According to state planning law, an internally consistent general plan is a document that has no conflicts. The text, maps, and individual components of the document are all consistent. To ensure consistency between the separate documents of the Calabasas General Plan, the individual components are cross-referenced. For example, summaries of the background data from the Calabasas General Plan: Community Profile document are included in the Calabasas General Plan: Community Issues document. In addition, to provide continuity throughout the separate documents that make up City's General Plan, each document is organized into the following major headings: Community Development and Design, Municipal Facilities and Services, Environmental Resources, and Environmental Hazards.
- The General Plan must be a long-term planning tool. By definition, a general plan for any community needs to include policies and programs which can be extended into the immediate and the long-term future. To develop these policies, there must be a clear understanding of the community, its past and present. The Calabasas General Plan: Community Profile document presents the background information necessary to understand the City. In addition, the Community Profile is not a static document. Each year after adoption of the General Plan, the City will review and update the document. As part of the City's General Plan Annual Review and Update, the community updates existing data and adds new information. The document continues to be an up-to-date source of information on the City.

The General Plan must be a statement of development policy. Development policy is a statement that guides action. It includes goals, objectives, principles, policies, and proposed actions, or standards. Development policy is presented in the Calabasas General Plan: Policy and Strategy document. However, development policy is not constant. It must evolve to meet the changing needs of a community. The Calabasas General Plan: Community Profile document provides the information necessary to evaluate proposed alterations in development policy.

MANDATORY GENERAL PLAN ELEMENTS

According to the State guidelines, a city's general plan must address the location of housing, business, industry, roads, parks, and other land uses; the protection of the public from noise and other environmental hazards; and the conservation of natural resources. These issues may be presented in the following mandatory components or "elements":

- Land Use: designates the proposed general distribution, location, and extent (including standards for population density and building intensity) of uses of land for housing, business, industry, open space, education, public buildings, solid and liquid waste disposal facilities, and other categories of public and private use.
- Circulation: correlates with the land use element and identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities.
- Housing: provides a comprehensive assessment of current and projected housing needs for all segments of the community and all economic groups. In addition, it contains standards and plans for the improvement of housing, and the provision of adequate sites for housing.
- Conservation: addresses the conservation, development, and management of natural resources.
- Open Space: details plans and measures for the preservation of open space for natural resources, the managed production of resources, outdoor recreation, and public health and safety, as well as identifying agricultural land.
- Noise: identifies and appraises noise problems in the community, and evaluates the compatibility of noise levels and specific land uses.
- Safety: establishes policies and actions to protect the community from any unreasonable risks related to natural and man-made hazards. The safety element includes mapping of known seismic and other geologic hazards.

The Calabasas General Plan: Community Profile document presents the background data and analysis for each of the seven-mandated elements described above.

However, a general plan need not be organized into these seven elements, so long as the issues required by State law are discussed within the document. For many communities, it may be preferable not to structure their general plans in this manner. For example, the City of Calabasas chose to address Open Space issues in its Community Development and Design and Environmental Resources Programs. Conservation concerns are also addressed in the Environmental Resources Program. Table I-1, which follows, shows how sections contained in the Calabasas General Plan generally correspond to the State's seven mandated elements. In addition, the City of Calabasas elected to include several optional elements in its general plan. They include: a Historic Preservation Element, an Urban Design Element, a Fiscal Management Element, and an Infrastructure Element.

B. THE CALABASAS GENERAL PLAN: COMMUNITY PROFILE DOCUMENT FORMAT

The Calabasas General Plan: Community Profile document is a summary of community characteristics and environmental setting which will help frame the issues of the General Plan. As such, it meets the data and analysis requirement of the General Plan. The document itself is divided into the major sections described below:

- Introduction -- provides a brief description of the Calabasas General Plan: Community Profile document. This section outlines how the document complies with the State General Plan Guidelines and how it relates to the other documents which make up the Calabasas General Plan. The introduction also describes the organization of the document.
- Community Development and Design -- contains a description of existing land uses, demographic information on housing and population, and an inventory of historic/cultural resources. It also includes a survey of community design features and data on fiscal management.
- Municipal Facilities and Services -- examines existing circulation and transportation, infrastructure, utilities, educational facilities, solid waste, parks and recreation, and public safety services.
- **Environmental Resources** -- contains an inventory of existing natural resources including hillsides, canyons, and ridgelines, open space lands, air quality, biological resources, water resources, and mineral resources.
- Environmental Hazards -- describes the potential environmental hazards in the study area including geology and seismicity, fire hazards, noise, and hazardous materials. This section also includes an analysis of disaster response facilities and services.

Appendices contain the technical reports summarized in the Calabasas General Plan: Community Profile document.

COMMUNITY DEVELOPMENT AND DESIGN

Community Development and Design section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Land Use and Housing elements. It also provides the information necessary to support the following optional elements: Historic Preservation, Urban Design, and Fiscal Management.

The Community Development and Design chapter includes the following major sections.

- Population
- Housing
- Land Use
- Community Design
- Historic Development and Cultural Resources
- Fiscal Management

MUNICIPAL FACILITIES AND SERVICES

The Municipal Facilities and Services section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for a Circulation element. It also presents the background information necessary to comply with the provisions of Proposition 111 and the Los Angeles County Congestion Management Plan. In addition, this chapter includes the information on public services within the City and addresses the relationship between public services and land use character.

The Municipal Services and Facilities chapter includes the following major sections.

- Circulation and Transportation
- Infrastructure
- Education Facilities
- Parks and Recreation
- Public Safety Services

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ENVIRONMENTAL RESOURCES

The Environmental Resources section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Open Space and Conservation elements. It also presents the background information necessary to comply with the provisions of the Southern California Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) requirements that local agencies address air quality issues.

The Environmental Resources chapter includes the following major sections.

- Hillsides, Canyons, and Ridgelines
- Open Space
- Air Quality
- Biotic Resources
- Water Resources
- Mineral Resources

ENVIRONMENTAL HAZARDS

The Environmental Hazards section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Noise and Safety elements.

The Environmental Hazards is includes the following major sections.

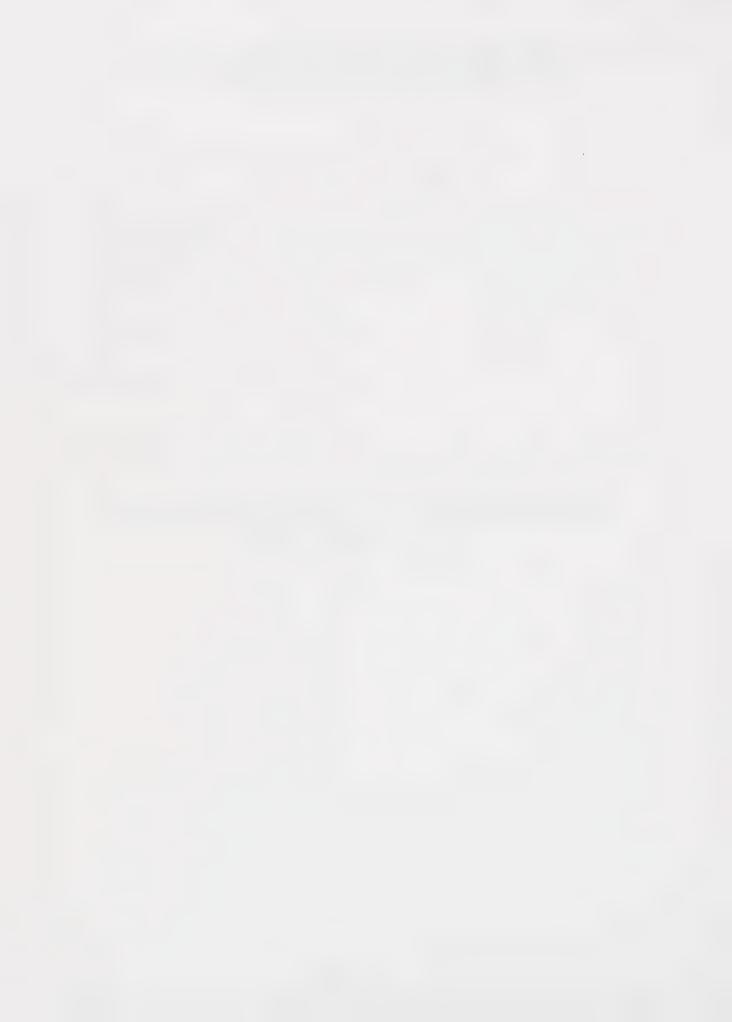
- Geology and Seismicity
- Fire Hazards
- Noise
- Hazardous Materials
- Disaster Response

Table I-1
Calabasas General Plan and
State Mandated Elements

Calabasas General Plan Components	State Mandated Elements	Optional Elements
Community Development and Design	Land Use Housing	Historic Preservation Urban Design Fiscal Management
Municipal Facilities and Services	Circulation	Infrastructure
Environmental Resources	Open Space Conservation	
Environmental Hazards	Safety Noise	

Source: Planning Network, 1993.

COMMUNITY DEVELOPMENT AND DESIGN



II. COMMUNITY DEVELOPMENT AND DESIGN

The Community Development and Design section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Land Use and Housing elements. It also provides the information necessary to support the following optional elements: Historic Preservation, Urban Design, and Fiscal Management.

The Community Development and Design chapter includes the following major sections.

- Population
- Housing
- Land Use
- Community Design
- Historic Development and Cultural Resources
- Fiscal Management

A. POPULATION

The 1990 Census of Population and Housing provides a wealth of data on Calabasas and its General Plan study area. Six block-groups embrace the General Plan study area, as indicated on Table II-1 and Figure II-1.

Table II-1
US Census Tracts and Block Groups
Calabasas General Plan Study Area
1990

Tracts	Block Groups
8001.00	1, 8, 9
8002.00	1, 9
8003.01	9

Source: Urban Research Associates, November 1992.

Although the City of Calabasas itself is not identified by the 1990 Census, the portion of these six block-groups lying within the incorporated cities of Agoura Hills and Hidden Hills can be subtracted out, leaving a geographic area that closely approximates the Calabasas General Plan study area. The overbounding which does occur in the southern portions of 8001.009 and 8003.019 does not result in serious overestimation since those are areas of generally low residential densities. However, as discussed in the following section, the population estimates have been revised to be as accurate as possible.

The population section looks at population growth trends and historical growth, projects future growth trends and examines population characteristics such as race and age.

POPULATION GROWTH TRENDS AND HISTORICAL GROWTH

Rapid growth has characterized western Los Angeles County over the past decade. Between 1980 and 1990, the region stretching west from the Los Angeles City line to the Ventura County line doubled in population, growing at an average annual rate of approximately four percent. The Calabasas study area shared in this rapid growth. Because of changing census geographies, the population growth for Calabasas itself cannot be determined directly from the census. However, the census does show that 48 percent of the existing housing stock in the six block-groups covering the Calabasas study area was constructed between 1980 and 1990. This is clear evidence of a doubling of the population during that time, following a similar doubling during the 1970s. By 1990, the population was 18,527 within Calabasas city limits and 1,784 in the surrounding study area for a total 1990 population of 20,311 (see Table II-2). Building permit data indicate that the area has grown to an estimated population of 21,761 as of January 1993, with 19,857 in city limits and 1,904 in the rest of the study area, as indicated on Table II-3.

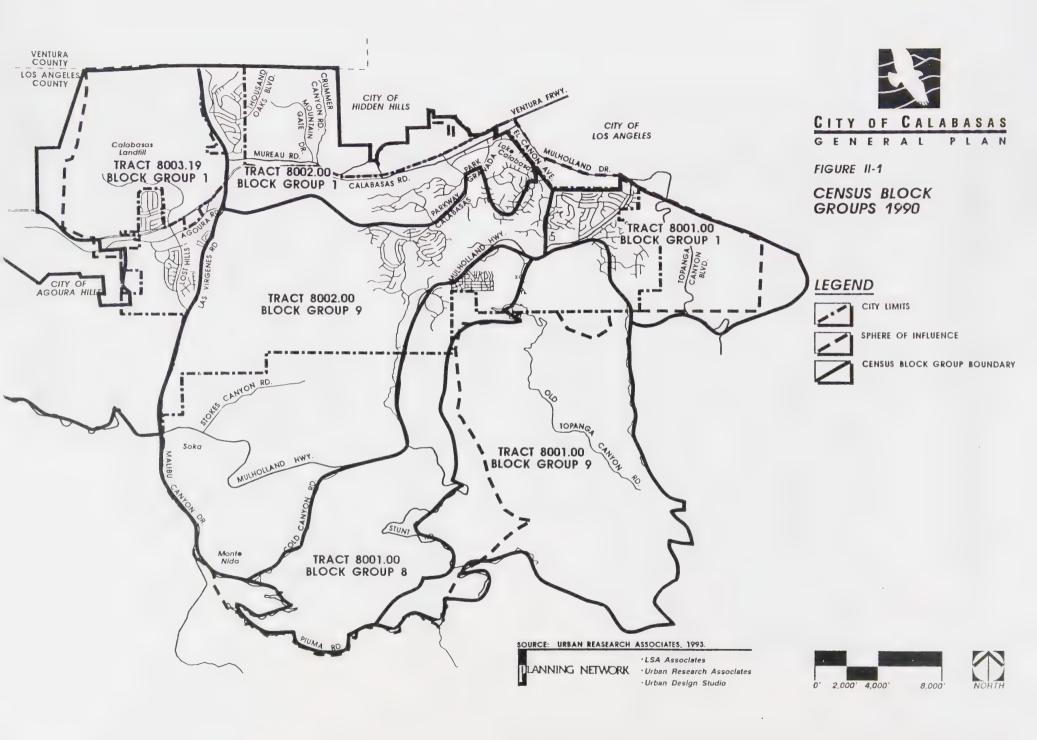


Table II-2
Estimates of Dwelling Units and Population
Calabasas General Plan Study Area
1990

Housing Units	Calabasas	Unincorporated	Study Area
Occupied	7,069	666	7,735
Vacant	788	41	829
Total	7,857	707	8,564
Population	18,527	1,784	20,311

Source: Urban Research Associates, March 1993.

Notes

Adjustments to dwelling unit totals include the following:

- Substraction of dwelling units from Census block group totals for areas lying outside General Plan study area based on aerial photos.
 Largest decrease was in Old Topanga.
- Addition of dwelling units within Los Angeles City southwest of Mulholland.

Table II-3
Estimates of Dwelling Units and Population
Calabasas General Plan Study Area
1993

Housing Units	Calabasas	Unincorporated	Study Area
Occupied	7,544	709	8,253
Vacant	813	43	856
Total	8,357	752	9,109
Population	19,857	1,904	21,761

Source: Urban Research Associates, March 1993.

Notes:

Adjustments to dwelling unit totals include the following:

- Addition of 500 dwelling units to City. Proportionate increase of 45 dwelling units to study area.
- Lowering of vacancy rate from 1990 figure of 10 percent to estimated 5 percent.

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POPULATION PROJECTIONS

Continued outward growth pressures from the San Fernando Valley suggest that growth pressures will remain strong in Calabasas and its General Plan study area. Counter forces such as the present economic slowdown and the hilly character of much of the unbuilt land should produce some slowing of growth. However, in the absence of explicit growth management policies, a continuation of recent growth trends points to an average annual population growth rate of at least three percent over the decade of the 1990s. At such a rate, the population of Calabasas and its General Plan study area would increase by approximately 7,100 persons over the decade of the 1990s. Market conditions could potentially create a higher growth rate than three percent.

Whether Calabasas itself grows at a three percent or higher rate will depend on policy decisions regarding land use and zoning, environmental protection and the provision of services. The recently completed community attitude survey indicated strong public sentiments in favor of slower growth and enhanced environmental protection. Growth in Calabasas over the decade could be far less than three percent per year if the City adopts land use policies consistent with public slow-growth sentiments. Thus, growth in Calabasas will be policy-driven and a function of any restrictions placed by the City.

POPULATION CHARACTERISTICS

In the General Plan study area the following population characteristics were examined race/ethnicity, income and age.

Race/Ethnicity

The ethnic/racial composition of the Calabasas population is predominantly White/Non-Hispanic (see Table II-4). Over eighty seven percent of the population falls into that category, while 6.4 percent is classified as Asian and 4.3 percent as Hispanic (all races). The small size of the minority population of Calabasas stands in sharp contrast with the population of Los Angeles County.

Table II-4 Ethnic/Racial Composition Calabasas General Plan Study Area 1990

Race Ethnicity	Calabasas and Study Area%)	Los Angeles County (%)
White/Non-Hispanic	87.6	41.0
Hispanic	4.3	37.3
Asian	6.4	10.4
Black	1.4	10.7
Other	0.3	0.5

Source: Urban Research Associates, November 1992.

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Income

The median household income in Calabasas and its General Plan study area in 1990 was \$66,421 compared with \$34,965 for the county as a whole. This topic is discussed further in the Household Characteristics section.

Age

The population of Calabasas varies from the rest of Los Angeles County. In general, Calabasas has proportionally fewer younger people (0-39 age groups) and older people (60+). However, Calabasas' percentage of people in the 40-59 age groups is significantly higher than Los Angeles County. The median age of Calabasas and its General Plan study area in 1990 was 32.6, while the median age in Los Angeles County as a whole was 30.8 years. The two largest age cohorts are 40-49 and 20-29 (see Table II-5).

Table II-5 Age Calabasas General Plan Study Area 1990

Age Cohort	Calabasas + Study Area (%)	Los Angeles County (%)
0 - 9	11.5	15.6
10 - 19	12.9	13.8
20 - 29	17.1	19.0
30 - 39	16.2	18.0
40 - 49	20.9	12.3
50 - 59	10.7	8.1
60 - 69	6.6	6.8
70 - 79	2.9	4.3
80 - 99	1.2	2.1

Source: Urban Research Associates, November 1992.

The elderly population (65+) comprises only 7.3 percent of the total, while the pre-elderly (55-64) represent only another 8.5 percent. As the large 40-49 age cohort grows older, the number of "empty-nest" families with grown children will increase over the next decade. The growth of "empty-nest" households suggests that neighborhood stability rather than change will predominate in many Calabasas neighborhoods during the 1990s. At the same time, the number of young-adults in the population may help maintain the proportion of households with children. From a planning perspective, the maturing of the young-adult population may produce an increase in the number of family households and an increase in family size. This points to the potential for a strong market for single family housing. It also means that the school-age population should at least remain stable despite the increase in empty-nest households. A substantial jump in the elderly population will not occur until the middle of the first decade of the twentieth-first century.

B. HOUSING

The Housing section examines the City's existing housing stock, area housing costs, household characteristics, and looks at the community's housing needs. In the review of the housing stock, unit type, tenure and vacancy rate, and unit condition are presented. The examination of housing costs addresses housing purchase and rental costs and housing affordability. Household characteristics presents information on household type, household size, and the education and income of members of the household. The discussion of community housing needs includes information on female-headed households, large households, the elderly, disabled persons, farmworkers, the homeless, and low income households.

Housing Unit Characteristics

Unit Type

Calabasas and the surrounding General Plan study area contained 9,109 housing units as of 1993 (see preceding Table II-3). The range of housing types reflects the peripheral-suburban nature of the community. Three-quarters of the units were single family dwellings (either detached or attached). Table II-6, below, presents a breakdown of the housing units in Calabasas, by housing type, in 1990.

Table II-6
Estimated Housing Units by Type
Calabasas General Plan Study Area
1990

Housing Type	Calabasas	Unincorporated	Study Area
Single Family Detached	5,270	400	5,670
Single Family Attached	830	61	891
2-4 Units	239	18	257
5-9 Units	292	23	315
10-19 Units	677	0	677
20 + Units	274	0	274
Mobilehomes	210	201	411
Other	65	4	69
Total	7,857	707	8,564

Source: Urban Research Associates, March 1993.

With over three-quarters of its housing consisting of single-family dwellings, Calabasas exceeds the Los Angeles County average for single-family dwellings by approximately 20 percentage points. The five percent mobile homes is also well above the county level of 1.8 percent. Calabasas falls substantially below the County averages for multi-family dwellings (17.7 percent versus 42.2 percent).

The building boom of the 1980s led to a significant increase in the number of higher-density condominiums and apartments. Apartment construction was concentrated in two areas: Malibu Canyon and the southern quarter of Lost Hills area.

During the 1980s, increasing demand and higher land and housing costs have lead to increased development of higher density housing in the western portion of the study area. However, this shift toward higher densities is not reflected in the housing mix of four proposed developments within the Calabasas General Plan study area. Based in part on policy decisions, the composition of the proposed developments leans heavily toward single-family dwellings. It is particularly noteworthy that the Malibu Terrace development was originally proposed to include 1,700 apartments, but has since been revised to include only single-family dwellings.

Table II-7
Proposed Residential Developments
Calabasas General Plan Study Area
1992

Proposed Residential Development		
Calabasas Park West	550²	198
Continental Communities ¹	75	60
Malibu Terrace ¹	115	0
The Enclave at Calabasas	250	0
Total	990	258

Source: Urban Research Associates, November 1992.

If these projects are completed as proposed, they will increase the population of the City and surrounding areas by approximately 3,350 persons.

Projects located in Los Angeles County.

These units were approved, but have not yet been built.

Tenure and Vacancy Rate

The high income and high proportion of single family dwellings in Calabasas results in a high proportion of owner-occupied residences. Over seventy six percent of the occupied housing units in the Calabasas General Plan study area were owner-occupied in 1990, compared with 48.2 percent for Los Angeles County.

However, the proportion of renter-occupied housing has grown significantly in recent years. Of the 3,008 housing units built during the period from 1985 to 1990, 1,274 units or 42.4 percent were occupied by renters in 1990. That compares with a renter-occupied proportion of 11.9 percent for housing units constructed prior to 1985.

Vacancy, measured as the rate of occupied versus unoccupied units, is a widely used indicator of housing need and choice, as well as of the relative health of housing markets. A vacancy rate of four to six percent in a mature community such as Calabasas generally indicates a fairly stable housing market with adequate choice. A lower vacancy rate indicates unmet needs, while a high vacancy rate indicates an oversupply of housing.

Housing unit vacancy in Calabasas is nearly twice that of Los Angeles County (see Table II-8). In 1990, 9.6 percent of Calabasas residences were vacant compared with 5.5 percent for the County. The highest vacancy rates occurred among medium size apartment complexes (5 to 19 units) and single family dwellings. Large apartments complexes, small multi-family developments, and mobile homes had lower vacancy rates.

Table II-8 Vacant Units Calabasas General Plan Study Area 1990

Housing Type	Vacant Percent
Single Family Detached	9.9
Single Family Attached	9.1
2 - 4 Units	0.0
5 - 9 Units	12.4
10 - 19 Units	15.5
20 + Units	6.0
Mobile Homes	2.7
Other	16.4
Total	9.6

Source: Urban Research Associates, November 1992.

The 1990 census figures overstate the actual vacancy rate in Calabasas. Of 864 vacant units in the study area, only 674 were actually held for rent or for sale. That equates to a vacancy rate of 7.6 percent. The remaining vacant units were either second homes or rented/sold but not yet occupied. Even the adjusted rate of 7.6 percent was probably inflated by the substantial number of new homes and apartments recently completed but not yet rented or sold as of April 1990. With the subsequent slow-down in building activity permitting demand to catch up with supply, the current vacancy rate is unlikely to exceed five percent.

Condition of Units

The condition of housing units is generally good in Calabasas. Housing throughout the community is well-maintained and exceeds minimum habitability standards. One objective measure of housing quality, the availability of full plumbing, is lacking in only one out of every five hundred (0.2 percent) housing units.

One major reason for the good condition of housing is the relative youthfulness of the housing stock. Fully 28 percent of the housing was constructed in the five years prior to the 1990 Census, while only seven percent (625 units) of all housing units are over 30 year old (see Table II-9).

Table II-9
Age of Housing
Calabasas General Plan Study Area
1990

Year Built	Percent
Before 1950	4.4
1950 - 1959	2.6
1960 - 1969	17.5
1970 - 1979	26.8
1980 - 1984	8.0
1985 - 1990	39.4
1990 - 1992	1.3
Total	100

Source: Urban Research Associates, November 1992.

Other reasons for the overall good condition of housing is the high rate of owner-occupied units (76.6 percent) and the relatively high income of Calabasas households. Owner-occupied units are often better maintained. In addition, higher incomes in the area allow residents to maintain or improve their homes.

Housing quality is more varied among older lower density rural housing scattered throughout the General Plan study area south of the City. Within Calabasas, the Calabasas Highlands and Old Topanga are areas where the housing quality is variable, with numerous older units, some in need of repair or showing indications of variable quality additions, interspaced with more recently constructed units.

Although the condition of housing in Calabasas is currently good, a significant jump in the number of housing units whose age is more than 30 years will occur over the decade of the 1990s. Thirty years is often regarded as the age when major repairs become more likely or obsolescence begins to set in. As of 1990, 625 units were more than 30 years old. By the year 2000, that number will increase by 1,574 to a total of 2,199.

Renovation and replacement of older or substandard dwellings by private development is actively occurring in Calabasas Highlands, which is eliminating blight in this area. This process is less in evidence in Old Topanga. Should private reinvestment not occur, in the Old Topanga area, more active steps such as expanded code enforcement may be appropriate to deter or eliminate blighted conditions.

Housing Cost

Housing Purchase and Rental Costs

Housing, particularly owner-occupied housing, is expensive in Calabasas. The median home value reported to the 1990 Census was over \$450,000, more than double the Los Angeles County median of \$223,800. Only five percent of the homes had reported values below \$200,000. Although home values in the study area may have fallen since 1990, Calabasas still remains one of the most expensive single family residential areas in Los Angeles County.

Monthly renter costs, while higher than in the adjacent San Fernando Valley, are less skewed toward the upper end than are owner costs (see Table II-10). The median monthly rent in 1990 in Calabasas was \$925, compared with median monthly owner costs in excess of \$2000. The County of Los Angeles had an average monthly rental cost of \$626.

Pending development proposals emphasize upscale single family and custom home sites. This points to continued expansion at the upper end of the Calabasas housing market. As a result, it is less likely that an adequate diversity of single family homes including homes affordable to low or even moderate income households, will be accommodated by proposed developments.

Table II-10
Housing Costs
Calabasas General Plan Study Area
1990

Costs/Month	Percent
RENTERS:	
Under \$300	3.3
300 - 599	3.5
600 - 749	10.1
750 - 999	47.3
Over 999	35.8
Median: \$925	
OWNERS:	
Under \$500	11.7
500 - 999	9.9
1,000 - 1,499	12.3
1,500 - 1,999	18.2
2,000+	47.9
Median: Over \$2,000	

Source: Urban Research Associates, November 1992.

Note that owner costs include mortgage, taxes, and insurance. Also note that the Under \$500 category for home owners includes 8.7 percent that have no mortgage, leaving 3 percent with very low mortgages (see Table II-10).

Housing Affordability

Data from the Census indicates that a large number of households in the Calabasas General Plan study area are experiencing housing affordability problems. Affordability becomes a serious concern when households pay 30 percent or more of their income for housing. In Calabasas, 40.9 percent of home owners fell above the 30 percent affordability standard, while more than half of all renters (53.7 percent) fell above the standard (see Table II-11). Fully two of every five renters reported that they were paying more than 35 percent of their income for housing.

Table II-11
Housing Affordability
Calabasas General Plan Study Area
1990

Costs as Percent of Income	Percent of Households
RENTERS:	
Under 20	19.6
20 - 24	14.4
25 - 29	12.3
30 - 34	11.6
Over 35	42.1
OWNERS:	
Under 20	36.4
20 - 24	12.5
25 - 29	10.2
30 - 34	8.1
Over 35	32.8

Source: Urban Research Associates, November 1992.

Rental housing affordability is clearly a serious problem in Calabasas, where 53.7 percent of all renters pay in excess of 30 percent of their income for housing. However, this problem is not peculiar to Calabasas, since the number of renters experiencing affordability problems is only marginally higher than the 48.9 percent figure for all of Los Angeles County. The number of elderly renters paying in excess of 30 percent of their income for housing expenses rises to 63.8 percent, a level that is roughly equal to that of Los Angeles County as a whole. However, rental housing affordability should not be viewed as strictly a problem for senior housing, since seniors make up less than three percent of the total rental households in Calabasas.

These objective measures of affordability are not matched by resident perceptions. In the Community Attitude Survey, only 12.8 percent of all respondents indicated that they were paying more for housing than they could afford. More than one-in-three respondents indicated that they could pay more if necessary. This may be a function of the high incomes in the area. Higher income households may chose to spend a portion of their discretionary income on their homes. Also, the high cost of housing may be accepted by Southern California residents, making the 30 percent standard unrealistic for this area.

Renters typically pay a much larger percentage of their income for housing than do home owners. This is due to income differences between renters and owners. According to the 1990 Census, the median household income for renters in 1990 was \$40,435 compared with \$66,421 for all households in the Calabasas General Plan study area.

Renters responding to the recent Calabasas Community Attitude survey were also more likely than owners to report that they were paying more for housing than they could afford. The proportion of renters indicating that they were paying more than they could afford was 26.8 percent, two and one-half times the percentage of owners who reported affordability problems.

The Community Attitude survey also indicates that renters were much more likely than owners to support more affordable housing programs and first-time buyer programs. One-half of all renters believed that affordable housing programs were a very important issue while only one homeowner in ten identified affordable housing as an important issue. Sixty-six percent of all renters believed that the need for programs to help first-time buyers was a very important issue compared to only fifteen percent of all owners.

As previously reported, housing affordability is generally defined as 30 percent of income. In the Calabasas General Plan study area, affordable units would be units that are 30 percent or less than the Los Angeles County median income. Since the median income for Los Angeles County in 1990 was \$34,965, an affordable housing unit would be a dwelling with a monthly cost of \$874 or less.

For many communities, subsidized low-income rental housing programs can help reduce housing costs for low-income households. The City of Calabasas contains 164 units of subsidized low-income housing. Lincoln Malibu apartments contains 150 units constructed in 1987. The contract expires after 1997, at which time the units may be converted to market rate apartments. Malibu Creek condominiums contains 14 units which will be sold to qualified households.

HOUSEHOLD CHARACTERISTICS

Household Type

The 1990 Census provides detailed estimates of demographics for 7,735 occupied households in Calabasas and its General Plan study area based on the 16.6 percent sample of all households which completed the Census long form (see Table II-12). 829 dwellings in the study area are vacant, and therefore, do not count as households. It should be noted that the occupied households and vacant dwellings totals are based on the 1990 Census, and do not reflect the revisions to the totals as described in the preceding section, Tenure and Vacancy Rate. Calabasas mirrors Los Angeles County in the proportion of households consisting of couples with children. Calabasas has a higher proportion of households consisting of couples without children, and lower proportions of single-parent and single-individual households. Generally, the distribution of households will determine the types of housing provided. However, in Calabasas, this distribution has less impact on the range of housing types; rather, household income has a greater impact on the types of housing provided.

Table II-12
Household Types
Calabasas General Plan Study Area
1990

Household Type	City	Unincorporated	Study Area
Couples with Children	1,923	181	2,104
Single Parent	396	37	433
Couples without Children	2,333	220	2,553
Living Alone	1,378	130	1,508
Other	1,039	98	1,137
Total	7,069	666	7,735

Source: Urban Research Associates, March 1993.

Household Size

Average household size in Calabasas, standing at 2.6, is substantially smaller than the 2.9 average for all of Los Angeles County. This reflects the large number of households consisting of couples without children, as well as a smaller number of children in households with children. The average size of apartment and condominium households is 2.3 persons per household, while the average size of single family dwelling households is 2.8 persons per household.

Education

The Calabasas population is generally well educated. According to the 1992 Community Attitude Survey, 74.1 percent of the responding households contain at least one member with a college degree.

Income

Calabasas has a high median annual household income of \$66,421 (see Table II-13). Nearly one-third of all households earn more than \$100,000 per year. Yet, the City also is home to a substantial number of low and moderate income households, with 12.9 percent of all households earning less than \$25,000 per year.

Table II-13
Area Household Income
Calabasas General Plan Study Area
1990

Household Income	Percent
Below \$15,000	7.6
\$15,000 - \$24,999	5.3
\$25,000 - \$34,999	8.9
\$35,000 - \$49,999	14.0
\$50,000 - \$74,999	21.0
\$75,000 - \$99,999	11.7
\$100,000 - \$150,000	14.8
Above \$150,000	16.7
Total	100

Source: Urban Research Associates, November

In 1990, according to Table II-13, 14.7 percent of the households in the General Plan study area could be classified as low or moderate income. That represents the proportion of households with incomes below 80 percent of the Los Angeles County median income. It is estimated that 1,125 of those low/moderate income households were located within the City of Calabasas, with the balance located in the surrounding General Plan study area.

Table II-14 indicates the household income range for very low, low, moderate, and high income households, based on federal Department of Housing and Urban Development and the State Department Housing and Community Development income categories. Table II-15 then presents the breakdown of the number of each type of households in the General Plan study area by these household income categories. Table II-15 indicates that approximately 15 percent of the households in the study area have very low or low incomes, while an additional 13 percent have moderate incomes. Table II-16 indicates the number of rental units in the study area that correspond to very low, low, and moderate income levels.

Table II-14
Household Income Range
Calabasas General Plan Study Area
1990

Income Level ¹	Percentage Range	Monthly Income
Very Low	0 - 50 percent	\$0 - \$437
Low	50 - 80 percent	\$437 - \$699
Moderate	80 - 120 percent	\$699 - \$1,049
High	Above 120 percent	Above \$1,049

Source: Urban Research Associates, 1993.

Households in the study area can be distributed into these four income groups through interpolation of the area household incomes (see Table II-13). As shown in Table II-15, almost two-thirds of the households in the Calabasas General Plan study area can be classified as high income. However, due to the relatively small number of households with median incomes, over twenty percent of the households fall into the low and very low income categories.

Table II-15

Number of Low and Moderate Income Households
Calabasas General Plan Study Area
1990

Categories - Categories	City	Unincorporated	Study Area
Very Low (<50 percent of County median) ¹	631	59	690
Low (50-80 percent of County median)	469	44	513
Moderate (80-120 percent of County median)	901	85	986
Remainder (>120 percent of County median)	5,068	478	5,546
Total	7,069	666	7,735

Source: Urban Research Associates, 1993.

Defined as a percentage of the Los Angeles County Annual Median Income of \$34,965, based on 1990 U.S. Census data.

County median income: \$34,965

Table II-16
Number of Rental Units by Household Income Levels
Calabasas General Plan Study Area
1990

Price Range	City U	Jnincorporated	Study
Under \$437	83	8	91
\$438 - \$699	145	13	158
\$699 - \$1,049	1,016	96	1,112
Total	1,244	117	1,361

Source: Urban Research Associates, 1993.

SPECIAL NEEDS HOUSEHOLDS

Certain segments of the population may have a more difficult time finding decent affordable housing due to special circumstances. The State of California defines these "special needs" households as female-headed households, large households (five or more members), the elderly, disabled persons, farmworkers, and the homeless. In Calabasas, these persons and households include up to 22.1 percent of the population (see Table II-17).

Table II-17
Summary of Special Needs Group
Calabasas General Plan Study Area
1990

Group:	Percent of Total Households/Population
Female-Headed Households	5%
Large Households ¹	7.7%
Elderly (65+)	7.3%
Disabled	2.1%
Farmworker Households	< 1%
Homeless	N/D

Source: Urban Research Associates, March 1993.

N/D Information on the number of homeless persons in the study area has not been documented. The total percentage assumes that each special needs group category is mutually exclusive.

Female-Headed Households

The 1990 Census identified 441 single-parent households in the Calabasas area or 5.6 percent of the total. Of those, 397 were headed by females and 44 by males. Single-parent households comprise 17.0 percent of all households with children. This number compares favorably with Los Angeles County where 26.1 percent of all households with children are single-parent households. In general, female-headed households have lower incomes. As a result, significant portions of their incomes may be spent on housing.

Large Households

A second category of special-needs households involves large families and the linked issue of overcrowding. Large households occur infrequently in Calabasas, where 92.2 percent of all households contain four or fewer persons. Large households are even less common among renter-households where fewer than five percent of all units have more than four persons.

Table II-18
Household Size
Calabasas General Plan Study Area
1990

	All Households Rent	
One person	19.5	28.5
Two persons	36.8	46.4
Three - four persons	35.9	20.9
Five persons	5.6	2.4
Six or more persons	2.1	1.8
Total	99.9	100

Source: Urban Research Associates, November 1992.

Overcrowding, defined as more than one person per room, rarely occurs in Calabasas. Only 166 households (2.1 percent) were identified by the Census as having more than one person per room. Those were divided almost evenly between renter and owner occupied households. Severe overcrowding, defined as more than two persons per room, occurred in only five households.

Elderly Housing

A third category of special needs households are those occupied by the elderly. The population over age 65 in 1990 was 1,511, accounting for 7.3 percent of the total population. Because the 1990 Census indicated a sharp jump in the number of persons in the 40 to 49 age group compared with the 50 to 59 age group, a major increase in the over-65 population is likely to occur after the year 2005.

The majority of the over-65 population in Calabasas live independently, either residing in their own family households (63.7 percent) or residing alone (19.2 percent). Another 12.2 percent live with adult children or other relatives, while 4.9 percent share housing with nonrelatives. None of the Calabasas senior population resided in group quarters or institutions, according to the 1990 Census. Although the Motion Picture Country House and Hospital is within the General Plan study area in the City of Los Angeles, no specialized senior housing exists within the City of Calabasas.

Countywide, 5.5 percent of the senior population resides in group quarters, according to the 1990 Census. Applying this percentage to the total over-65 population of 1,511 suggests that the general level of demand for specialized senior housing in Calabasas would be on the order of 80 to 90 individuals.

The Calabasas senior population is slightly less likely to live below the poverty line than the population as a whole. Only four percent of the over-65 population was identified as having income levels below the poverty level, compared with 4.7 percent of the entire population.

Housing for the elderly is not only a physical, but a social planning issue. The elderly are largely dependent upon fixed incomes (pensions, social security, etc.), which are sensitive to increased housing costs. Elderly renters often must pay in excess of 30 percent of their income for housing. Elderly homeowners may have difficulty paying for their homes, even if they have small or no mortgage payments, as they may not be able to afford necessary repairs, taxes, or upkeep on their property.

Many elderly experience isolation when living alone. The physical disabilities that affect elderly persons can make living alone not only lonely, but dangerous. The elderly in various degrees of dependent living should have access to consumer and public services within approximately 2,000 feet of their homes. Housing specifically designed for the elderly should be permitted only in areas with adequate services, and with traffic and walkway regulations that support a pedestrian lifestyle and are accessible to the handicapped.

Housing sites for the elderly, shopping centers, and medical facilities should be connected by public transportation, as many elderly are unable, or no longer wish, to drive. Access to medical facilities is especially important, since the elderly, as a group, use health care services at three times the rate of the general population.

Housing for seniors consists of several distinct types, each meeting a unique set of shelter needs. These include: independent living, congregate housing, assisted living, convalescent care, and continuing care.

Independent living projects are projects and communities designed for senior citizens, which may include single family detached, condominium, and apartment housing types. Meals and other basic services beyond shelter, security, and recreational facilities are not provided. The market for independent living facilities include seniors who are in good health and seek a low maintenance, leisure-oriented lifestyle. Independent living projects are generally sited in the same manner as non-senior projects, but may often be appropriate at higher densities than non-senior projects.

The congregate housing environment consists of individual units within a multi-family structure, or complex, with areas for group socializing and dining. Individuals who live in this type of housing are generally self-sufficient, mobile, and require no special care. They have, however, chosen to have certain services provided for them. Congregate facilities generally feature security, on-call medical assistance, meal packages, periodic housekeeping, scheduled transportation, and social activities. Congregate living projects have many of the same characteristics as multi-family housing, and are often also located within commercial areas, due to the proximity of services for project residents.

The assisted living environment is designed for the more frail senior population. It is service-intensive, and includes social and support services. Assisted living combines a 24-hour nurse-monitored living environment, with assistance in daily living activities, such as dressing, bathing, grooming, hygiene, and self-administered, but supervised, medication. Emergency medical provisions, utilities, meals, transportation, social and recreational activities are also provided. Assisted living environments have grown out of numerous studies that have shown that many persons now living in nursing homes do not require the intensive health care services provided by those institutions. Assisted living facilities have thus emerged as a more dignified and economical alternative for the frail elderly who require some assistance in daily living. Assisted living environments are similar in their locational requirements to congregate housing.

Extended care facilities are medical service-intensive facilities which integrate shelter, medical, nursing, psychological, and rehabilitation services for those requiring 24-hour assistance. They are similar in their locational requirements to hospitals.

Continuing care facilities are based on the concept of "lifetime occupancy," providing a range of living environments for seniors. Within a multi-building complex, continuing care facilities cover the continuum of care options from independent living to skilled nursing. Continuing care facilities can take on a number of different characters, depending upon their emphasis. Thus, a number of different physical settings might be appropriate for such projects.

Disabled Persons

According to the 1990 Census, 426 residents of the Calabasas General Plan study area are classified handicapped due to mobility or self-care limitations. This represents two and one-half percent of the total population over age sixteen. Not surprisingly, the percentage of individuals with mobility and self-care limitations is substantially higher among older residents (see Table II-19). In comparison to Los Angeles County, Calabasas has a smaller percentage of disabled persons; Los Angeles County residents who are disabled constitute 8 percent of the total population. Calabasas' relatively small number of elderly residents is the likely reason for this difference.

Table II-19
Individuals with Mobility/Self-Care Limitations
Calabasas General Plan Study Area
1990

Age N	lumber Persons	Percentage
Under 65	303	2.0
65 - 74	51	5.4
75 or Above	72	15.9

Source: Urban Research Associates, November 1992.

It should be noted that these numbers refer specifically to "noninstitutionalized" individuals living in private homes. For the majority, that arrangement is undoubtedly preferable. However, the lack of specialized care facilities in Calabasas may limit the range of housing choice for some of these individuals and their families.

Farmworkers Housing

Housing for farmworkers is not a serious issue in Calabasas. Farmworkers comprise only 1.2 percent of the resident workforce in the community. Based on that figure, the number of farm worker households is estimated to be less than 100. No special needs for farm worker housing are known to exist in Calabasas.

Homeless Population

The need for emergency shelter and services for the homeless is less pressing in Calabasas than in may other parts of Los Angeles. In the attempt by the 1990 Census to count the "street" homeless, no homeless persons were identified within the area occupied by Calabasas. This does not mean that homelessness is completely absent from Calabasas and its General Plan study area. In an outlying suburban community like Calabasas, however, homelessness is more likely to involve the need for emergency shelter arising from domestic conflicts and domestic violence.

No dependable estimate exists for the number of Calabasas residents needing emergency shelter over the course of a year. There are no shelters in the Calabasas vicinity, and existing shelters in the San Fernando Valley do not have data on the last place of residence of those needing their services. One recent study of a community roughly comparable to Calabasas suggested an annual need for emergency shelter equivalent to one person for every 2,000 in the population. For Calabasas, that would equate to approximately ten needy persons per year.

Service providers indicate that the San Fernando Valley and western Los Angeles County are not well served with emergency shelters compared with other areas of Los Angeles County. The shelters that do function in the Valley are located in areas such as Van Nuys and North Hollywood where the incidence of need is much greater than in the West Valley.

Thus, while it is certainly true that the need generated by a city such as Calabasas is low in comparison to other less wealthy areas of Los Angeles County, it is also true that services are scarce or non-existent. The result can be a very real service gap given the distance separating Calabasas from areas further east in the San Fernando Valley and the fact that the demand at the existing locations exceeds the capacity on most days.

The low rate of emergency housing need arising among the spreadout population of western Los Angeles County makes it unlikely that localized service would be supportable. It is probably more important that information concerning the availability of emergency shelters be made available through referral services or through communications from the City or other service agencies.

Affordable Housing

The Southern California Association of Governments is required to identify existing and future housing needs for Los Angeles County communities every five years. The most recent Regional Housing Needs Assessment was completed in 1988. Since Calabasas was not incorporated until 1991, the Calabasas share of the regional housing need will not be established until the next Regional Housing Needs Assessment is completed by SCAG in late 1993 at the earliest. SCAG staff members have indicated that no estimate of housing need will be available for Calabasas before the next report is issued, and that any attempt by others to estimate the level of need prior to that time will not be accepted by the State. In addition, only SCAG can decide exactly what method for measuring low-income housing need will be utilized in future reports and how that method will be applied.

COMPARISON OF HOUSING TRENDS TO COMMUNITY VALUES

Insights into current community values can be gained from the Community Attitude Survey administered during the Fall of 1992 as part of the General Plan process. Responses to the survey came from a sample of 399 Calabasas households. They were asked to respond to a broad range of questions regarding community design, housing, growth, economic development, transportation, and local services.

In a number of instances, prevailing community values are at odds with current housing trends. One potential mismatch between existing trends and community attitudes is that of population growth. While growth pressures continue to be strong, four of every five respondents expressed a preference for slower growth than that experienced in the recent past. One out of two respondents stated a preference for no additional growth. In addition, community attitudes also indicate a desire to control development in unincorporated areas adjacent to the City. This could include annexation of these areas to prevent massive scale developments.

Another area of concern is the shift toward higher density housing. A majority of the respondents to the survey believe that the existing housing mix contains too many apartments, while more than one-third believe there are too many condominiums. Only about one in twenty believes that there should be a higher proportion of high-density housing in the housing mix of the community.

A third area of concern involves the continued expansion of housing into areas of steep slopes. Nine out of ten residents view open-space preservation and hillside protection as very important issues in the General Plan process.

Opinion is somewhat divided on a number of other issues, with sizeable minorities holding opinions at odds with current conditions and trends. Roughly one in three believes that there is insufficient senior housing in Calabasas. A similar proportion believes that there are too many gated communities, while roughly one in four believes that the need for affordable housing and a first-time buyer program are important issues.

Community division over the issue of affordable housing is especially apparent. Roughly one in ten reported paying more for housing than they could afford, while more than one in three indicated that they could afford to pay more if they had to.

Jobs-Housing Balance

A major growth issue for Calabasas and other outlying communities of Los Angeles County is the balance between housing and jobs. Efforts to achieve greater balance between employment and housing growth lie at the heart of regional mobility and clean air planning. At the same time, the level of commercial development needed to achieve balanced growth often meets with community resistance at the local level. Because Calabasas is recently incorporated, no measure of the number of jobs in the community has been made by SCAG. However, it is possible to calculate a rough estimate of the number of jobs by applying multipliers derived from other studies of suburban land use and employment. On that basis, it is estimated that the land use mix of Calabasas supports approximately 7500 jobs. Comparing that figure to the total of 8014 occupied housing units indicates a ratio of slightly less than one job per household.

At present, Calabasas is moderately job-poor (1.0 job per household) compared with the Los Angeles County ratio of approximately 1.5 jobs per household. However, the presence of office and commercial development along the Freeway corridor does permit the community to avoid the extremely low levels of .5 jobs per household or less, frequently found in outlying residential communities around the periphery of the metropolitan area. Looking to the future, the availability of undeveloped commercial acreage should permit the community to sustain or even improve its jobs-housing balance. Much depends, however, on the rate of future population growth and the uncertain impact of future policy decisions on the eventual intensity of both residential and commercial land use.

Governmental Housing Constraints

The State Housing Element Guidelines require that the Housing Element address public actions which might constrain the maintenance, improvement or development of housing. The major constraints imposed by government are decreasing federal and state commitments to housing, conflicting local responsibilities, development standards, fees, and processing time.

Decreasing Federal and State Commitment to Housing Programs

The emphasis placed by the federal and state governments on housing policies and funding has traditionally shifted with changing administrations and priorities. However, there has been a clear trend to de-emphasize federal and state housing programs over the past decade. During this time, Federal funding for housing programs has been sharply reduced. A concurrent reduction in state funding for housing occurred over the same time. This leaves local governments in California with a mandate to provide programs to facilitate housing for all economic segments of the community and without access to the funds to maintain such programs. Given the budgetary problems being experienced by both the federal and state governments, it is unlikely that increased funding for housing programs will be forthcoming in the near to mid-term future. It is possible that remaining housing programs will face further reductions in funding.

Conflicting Responsibilities of Local Government

The mandate that local governments provide housing for all economic segments of the community is but one of many, often conflicting, responsibilities they face. In addition to dealing with issues of affordable housing and housing rehabilitation, cities must provide municipal services and facilities, protect the natural environment, ensure a high quality of development and urban design, reflect the concerns of city residents, and facilitate increases in local employment and sales tax-generating uses. These responsibilities must be met in an era of increasingly tight budgets. As a result of state laws relating to municipal finance, reductions in federal and state funds for infrastructure and other programs, and changing public attitudes toward growth, local agencies have had to require that development internalize many costs which were once subsidized by various public funds. As a result, the cost of development inevitably increases and the American dream of owning a home becomes more difficult for those who are not fortunate to already own a home.

Often in contrast to the mandate for local governments to provide housing for all economic segments of the community, is the democratic principle that government respect the desires of the governed. In many communities, "low and moderate income housing" is perceived as a problem to be avoided, rather than as a public responsibility, and individuals are electing local government on a platform of "no more apartments". The result is that community acceptance of multi-family development or low and moderate income housing is severely limited or non-existent.

Development Standards and Land Use Controls

Development standards include zoning ordinances, subdivision ordinances, and building code requirements. The most far-reaching constraints are those contained in the City zoning ordinance which is the most traditional tool used by a local jurisdiction to regulate the use of private land. Zoning regulates the use; density; floor area; setbacks; parking; and placement and mix of residential, commercial, and industrial projects to reflect the community's development goals and objectives. Zoning can reduce the supply of land available for residential development by placing land in open space or buffer zones, or by rezoning residential land for other uses. Zoning also regulates the intensity of residential land use through minimum lot size requirements. It is important that the minimum lot size not be too large because this would: (1) reduce the potential supply of housing by limiting the number of units that can be built on a parcel of land, (2) and would increase the land cost per unit. High land costs may lead to increased construction cost for the developers.

Subdivision regulations which govern the division of a parcel of land into two or more smaller parcels can increase housing construction costs. The requirement that site improvements and amenities such as landscaping, underground utilities, and landscape maintenance districts be required in a subdivision can also escalate housing prices.

When analyzing development constraints, it is important to distinguish between those constraints that are excessive and unreasonable, and those designed for a particular purpose. The City, while encouraging housing, is also concerned about the living environment that is created. Standards for density, height, setbacks, undergrounding of utilities, and aesthetics are designed to create residential projects and areas that are functional and aesthetic. The conditional use permit process, although it lengthens approval time, is thought to be a reasonable compromise in allowing city residents input on projects which may affect their area and as a method of affording better project design.

Building codes regulate new construction and substantial rehabilitation. They are designed to ensure that adequate standards are met to protect against fire, collapse, unsanitary conditions and safety hazards.

Building costs do not appear to be unduly increased through local building codes. However, sate regulations with respect to energy conservation, though perhaps cost effective in the long run, may add to initial construction costs.

Fees and Processing Time

There are two basic types of fees, those for the processing of development applications (subdivisions, conditional use permits, etc.), and those to pay for the costs associated with new development (dwelling units, traffic signals, sewer connections, etc.). The City also requires development impact fees when new development occurs. Fees for plan check and building permits are determined based upon the valuation of the structure. Planning and development fees charged by the City of Calabasas are indicated on Table II-20.

The role that fees play in constraining the production of housing is difficult to measure, although they can affect housing prices in certain markets. The theory behind fees is that new development should bear its own costs, and that these costs should be spread as equitably as possible. State law requires that fees must bear a reasonable relationship to the actual costs incurred by the City, so that they do not becomes excessive. Even so, fees may add significantly to the cost of a housing unit, especially in those areas of the City that are largely undeveloped and require new infrastructure and services to be developed.

Table II-20 Planning and Development Fees

Initial Study	\$350	
EIR/EIR Addendum/Focused EIR	Consultant fees plus 20%	
Negative Declaration/Mitigated Negative Declaration	\$2,500	
Resources/Cumulative Impacts Assessment Reports	Consultant cost + 20% staff review time	
Zoning Fees		
Conditional Use Permit (Residential)	\$750 plus \$25 for each additional lot or dwelling	
Conditional Use Permit (Commercial/Industrial)	\$2,500 plus \$25 per 1,000 sq. ft.	
Development Agreement	\$2,200 plus attorney fees	
Oak Tree Permit	\$200	
General Plan Amendment	\$2,200 plus \$40 per acre	
Administrative Review	\$150	
Zone Changes	\$800 plus \$40 per acre	
Site Plan Review (Residential)	\$300 plus \$25 per unit	
Site Plan Review (Commercial/Industrial)	\$500 plus \$25 per 1,000 sq.	
Specific Plans	\$2,000 plus \$25 per residenti unit and \$25 per commercial/industrial acre	
Sphere of Influence Amendment	LAFCO fees plus \$1,500	
Annexation	LAFCO fees plus \$1,500	
Sign Permits	\$300	
Subdivision Fee	s	
Tentative Tract Map	\$2,500 (first 10 lots/units) \$60 per lot (11-25 lots/units) \$30 per lot (25 + lots/units)	

Table II-20 Planning and Development Fees

Subdivision Fees (C	ont'd)
Tentative Parcel Map	\$1,925
Revision of Maps	\$450 for each major revision
Engineering Fee	S
Tract and Parcel Maps	\$3,000 plus \$30 per lot
Lot Line Adjustment	\$1,300 plus \$150 per parcel
Plan Check	\$720 plus additional costs
Traffic Study Reviews	\$3,000 deposit
Inspections	\$720 plus additional costs
Grading Fees	based on volume of cubic yards graded
Building Permit F	9 8 \$
\$ 0 - \$ 700 Valuation	\$ 51.50
\$ 700 - \$ 1,000 Valuation	\$ 51.50 - \$ 77.50
\$ 2,000 - \$ 25,000 Valuation	\$ 77.50 - \$ 557.50
\$ 25,000 - \$ 50,000 Valuation	\$ 557.50 - \$ 950
\$ 50,000 - \$ 100,000 Valuation	\$ 950 - \$ 1,530
\$ 100,000 and Up	\$ 1,530 and Up

Source: City of Calabasas, March 1993.

Before development can occur, it is necessary that certain permits, inspections, and approvals be obtained. These procedures, although necessary to insure that the development is safe and in compliance with local regulations and building code requirements, can sometimes lead to delays in projects and subsequently increase costs. Moreover, excessive processing time may act as a constraint on the production of affordable housing, because it increases carrying costs to the developer for land, financing, etc.

Non-Governmental Constraints

Various factors not under the control of government also affect the cost, supply and distribution of housing. These factors include land cost, construction costs, financing costs, speculation, availability of infrastructure, and physical constraints.

Land and Construction Costs

The costs of improved land as a percentage of new home cost rose steadily in California during the 1970's, increasing from 21.0 percent to 27.8 percent in 1980. Land costs include the costs of raw land, site improvements, and all costs associated with obtaining government approvals. Building and construction costs in Calabasas are \$88.95 per square foot (improved) and \$28.95 per square foot (unimproved).

Financing Costs

The cost of permanent mortgage financing for new and existing homes, as well as cost of new residential construction financing play a significant role in the affordability of housing. General inflation in the economy directly and indirectly causes housing prices to increase, which in turn raises finance costs. As the absolute price of a home increases, it adds to the mortgage amount which result in increases in the principal, interest, insurance, and taxes a home buyer must pay.

Speculation in real estate occurs when real estate investors buy housing or land at "low prices" and then resell it at a much higher value within a short period of time. The problem is particularly acute if property rapidly changes hands from speculator to speculator. The price the eventual long term owner or consumer will pay could be highly inflated. Speculation affects not only the individual property, but the market climate in the area as a whole.

Because there are few statistics available on the rate of property turnover and the profit received from transactions, the amount of speculative activity and its impact on the City's rising housing costs is not clearly known at this time.

Infrastructure

Another factor adding to the cost of new construction is the cost of providing adequate infrastructure, major and local streets, curbs, gutters, sidewalks, water and sewer lines, street lighting, which is required to be built or installed in new development. In most cases, these improvements are dedicated to the City, which is then responsible for their maintenance. The cost of these facilities is borne by developers, added to the cost of new housing units, and eventually passed on to the home buyer or property owner.

Physical Constraints

A majority of the Calabasas study area consists of slopes where the topography acts as a limitation to various types of development. The slopes and hills present moderate limitations, such as excavation and grading. Steeper slopes present severe limitations, requiring extensive excavation and possibly some blasting during construction. In addition, these areas are limited due to access and utilities needed to support urbanization.

Calabasas' proximity to downtown Los Angeles has made it a relatively easy access to employment centers in the Los Angeles area, allowing people to move to Calabasas. However, as the population increases, traffic congestion is making this more difficult and may become a significant constraint to further growth in the future.

Other constraints to development include Los Angeles County Significant Ecological Areas (SEAs) within the study area. These areas, as identified by the County of Los Angeles Technical Advisory Committee, contain unique or unusual plant and/or species assemblages, or areas or habitat that are rapidly declining in the Los Angeles area. Usually, these Los Angeles County SEAs may not be feasibly developed, or may require extensive mitigation to ensure that these plant and animal species are preserved. Currently, there are three Los Angeles County SEAs in the Calabasas study area (Los Angeles County SEA Nos. 5, 9, and 12). For additional information, see section V-D (Biological Resources), of the Community Issues Report.

The study area's geology and close proximity to the Malibu Coast fault and the Simi fault, as well as other active regional faults, such as the San Andreas fault, may pose some concern to development. These faults could produce strong earthquakes which would generate substantial earthshaking, and trigger landslides, mud, and debris flow during a period of heavy rain.

The Calabasas study area principally falls into an area of minimum flooding, as defined by the Federal Emergency Management Agency. However, areas found along canyon bottoms along the alignments of the primary drainage courses are designated within 100-year flood potential zones. These canyon areas would have severe limitations on development. However, to protect existing development in these areas, the City participates in Federal Flood Insurance Program.

Soils found in the study area may present significant limitations to urban development. The areas where expansive soils are found may cause some problems in terms of development, such as damage to building foundations, highways, and other surface structures.

Some areas within the Calabasas study area may be prone to liquefaction, differential settlement, and landslides. Engineering studies are required in these areas to analyze the feasibility or most appropriate design and construction techniques to mitigate potential problems. In general, lower density developments are typically encouraged in areas subject to these conditions.

C. LAND USE

The Land Use section examines past growth trends in the City, existing land use patterns, existing plans and zoning, and interagency land use coordination. In the review of past growth trends in the City, information on historical development trends, annexations, approved projects, and proposed projects is presented. The examination of existing land use patterns addresses existing land use within the City, specifically examining residential, business, public uses, and open lands, in addition to looking at development outside the City but within the General Plan study area. Existing plans and zoning presents information on the Calabasas Foundation Plan and the City zoning ordinance. This subsection also includes a discussion on incompatible land uses. The presentation on interagency land use coordination lists agencies likely to be involved in land uses issues within or adjacent to the Calabasas General Plan study area.

GROWTH PATTERNS

Historical Development Trends

Residential land use development in Calabasas has followed a general east to west course since the 1960s. Stimulated by the construction of the Ventura Freeway and the westward expansion of population across the San Fernando Valley, the eastern-most part of the City experienced its most rapid growth in the 1960s, with growth continuing strong into the 1970s and slowing noticeably during the 1980s. The central portion of the City, west of Old Topanga, experienced substantial growth during the 1970s, with even more rapid increases during the 1980s and 1990s. The western portion of the City, west of Las Virgenes, experienced nearly all of its residential growth over the last decade.

Much of the land use pattern of Calabasas has taken shape during the 1970s and 1980s, when three-quarters of the City's residential land was developed. Over time, residential development has shifted from a nearly exclusive reliance on detached single-family housing toward a greater balance between single family and higher density condominiums and apartments.

Non-residential land use development is generally younger than residential development. Calabasas lacks a well-defined historical core, though the northeast corner of the City near Calabasas Road and Mulholland Drive is home to some structures associated with 19th century overland travel. Nascent functional areas are beginning to appear as the general outlines of the non-residential land use structure of the City emerge from the offices and shopping centers built during the recent past. Generally, however, the non-residential land use development has occurred too recently to create definable development trends.

Annexations

At the time of incorporation in 1991, the City occupied approximately 11.4 square miles. Subsequently, two annexations have received approval. One, The Enclave at Calabasas located east of Las Virgenes Road and north of Mulholland Highway, consists of approximately 1.5 square miles. The second is a small 6 acre parcel located along the western edge of the City north of the 101 Freeway.

Approved Projects

Calabasas Park Center (Kilroy-Ahmanson): 1,495 square foot commercial development on 67 acres with 1,295,000 square feet of office, 50,000 square feet of retail, and a 225 room hotel approved by Los Angeles County, and under construction south of Calabasas Road between Parkway Calabasas and Park Granada Boulevard;

The Promenade (Pazar): 11.6 acre (190,000 square foot) retail development approved by the City for the southeast corner of Las Virgenes Road and Agoura Road.

The Enclave at Calabasas (Micor): 938 acre residential development with 250 custom single family home lots approved by the City for the Enclave at Calabasas annexation east of Las Virgenes Road;

Calabasas Park West (Baldwin): 1,276 acre development with 550 single family homes a commercial facility originally approved by Los Angeles County for the Baldwin property south of the 101 Freeway and west of the existing Calabasas Park residential development, the proponents of the project have recently submitted a revision to the project eliminating the commercial uses and adding 198 duplexes.

Proposed Projects

Continental Communities 207 acre mixed-use development with 75 single family homes, 60 apartments, and 39.5 acres of commercial uses proposed for the northwest corner of the 101 Freeway and Las Virgenes Road; this development is in the City's General Plan study area immediately adjacent to the city limits;

Malibu Terrace 494 acre mixed-use development with 115 single-family homes, and 12.8 acres of neighborhood commercial uses proposed for the canyons and hillsides above Malibu Canyon; this development is in unincorporated Los Angeles County immediately adjacent to the city limits;

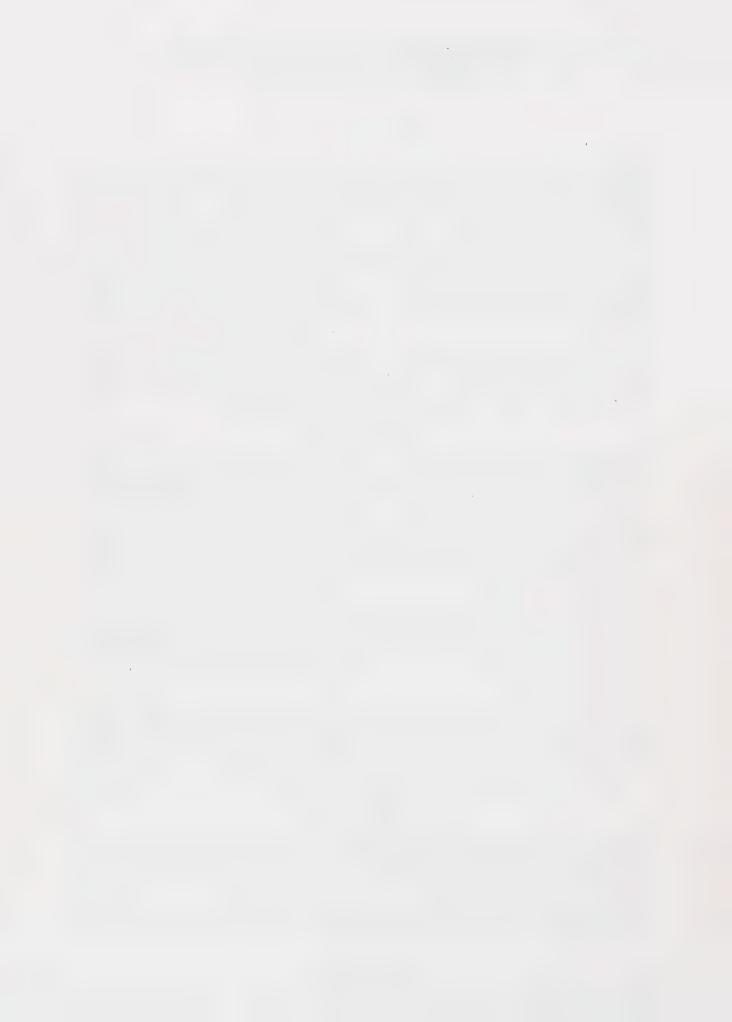
Ahmanson Ranch 1,900 acre mixed residential, commercial, and recreational development was approved in the southeast portion of Ventura County immediately north of the City's General Plan study area. However, the project is currently involved in litigation. The proposed land use phasing plan includes 3,000 dwellings units and 229 acres of retail, hotel and office developments.

These proposed developments raise a number of important land use and design issues related to hillside development, including hillside and ridgeline disruptions, and the loss of undeveloped land and open space. These issues, along with potential traffic impacts, are dealt with in greater detail in subsequent sections of this report.

EXISTING LAND USE PATTERNS

Calabasas can be described as a partially built-out primarily residential community, that contains areas of undeveloped land and open space. The City contains relatively little commercial or industrial land, a reflection on its residential character and the close proximity to built-up areas to the east in the San Fernando Valley.

The land use acreages identified for the City of Calabasas and the adjacent unincorporated areas of the General Plan study area are indicated on Table II-21 and Figure II-2.



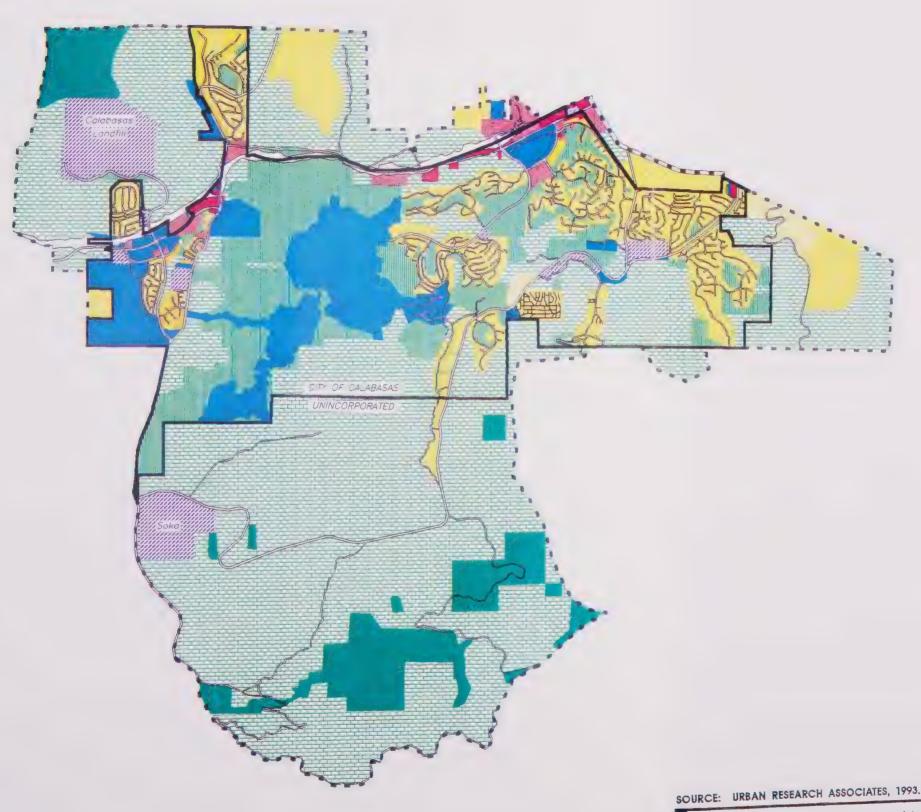




FIGURE II-2

EXISTING LAND USE

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



Single Family Subdivisions



Multi-Family



Mobilehomes



Retail



Office



Public 3: Ques -Public



Vacant & Undeveloped



Uncommitted Open Space



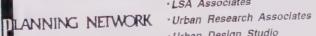
Dedicated Open Space



State/Federal Recreation



Roads/ROW



· LSA Associates

· Urban Design Studio





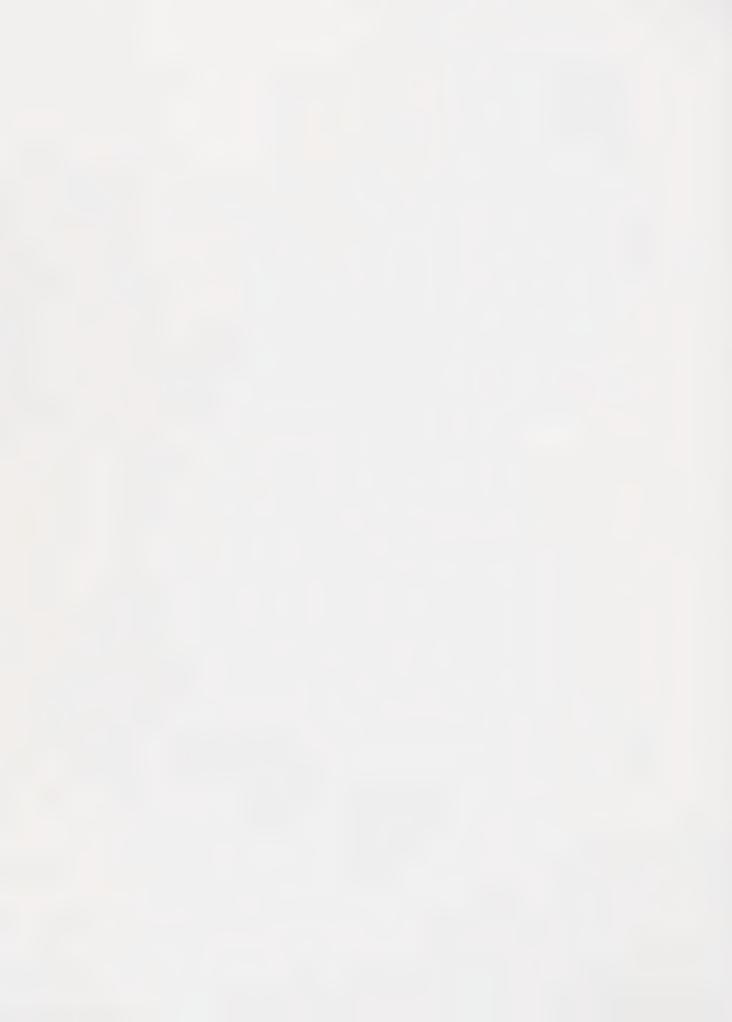


Table II-21
Existing Land Use Acreage
Calabasas General Plan Study Area
1993

Land Use Type	Calabasas	Unincorporated	Study Area
Residential			
Single Family Subdivisions ¹	1,544	763	2,307
Multi-Family Dwellings	157	0	157
Mobilehomes	30	113	143
Business			
Retail	66	8	74
Office ²	107	84	191
Public			
Public/Quasi-Public	105	610	715
Roads/Right-of-Way	711	453	1,164
Open Land			
Vacant/Undeveloped ³	1,495	35	1,530
Uncommitted Open Space⁴	1,921	8,693	10,614
Dedicated Open Space⁵	2,136	30	2,166
State/Federal Recreation	0	1,276	1,276
Total	8,272	12,065	20,337

Source: Urban Research Associates, March 1993.

Single-family subdivisions may include small amounts of higher density housing.

Office land use includes a minor amount of light industrial uses occurring in complexes largely devoted to service business and office functions.

Vacant/undeveloped land includes land approved for development.

Uncommitted open space includes undeveloped land where no developments have been approved. It also includes small, scattered areas of agriculture and rural-density housing in unincorporated areas south of the City.

Dedicated open space includes land within existing or proposed developments that is dedicated to open space preservation or open space recreation.

Existing Land Uses in the City

Residential Land Use

Residential development in Calabasas is divided by the Ventura Freeway, topographic barriers, and the shortage of through streets.

The residential structure of Calabasas is characterized visually by numerous gated residential communities which set large blocks of residential land apart from the overall community. Gated communities, which comprise approximately 496 acres of the residential land use, dominate the central portion of the residential landscape west of Old Topanga Canyon Road. They also occur at scattered sites in the hilly southeastern sections of the City.

The number of gated communities should not mask a considerable diversity of residential land uses. Older single family tract housing occurs at the eastern and western portions of the City. Higher density apartments and condominiums occupy 157 acres, largely concentrated at four sites. These include the extreme eastern corner of the City near the intersection of Mulholland Highway and Mulholland Drive, in the northeast portion of the City along Park Granada Boulevard and Park Street near the Calabasas Inn, in the Malibu Canyon area along Las Virgenes Road north of the 101 Freeway, and at Malibu Lincoln Meadows to the southwest along Las Virgenes Road. Large-lot custom homes and rural housing can be found along major roads throughout much of the hilly terrain to the south.

Business Land Use

Retail, office, and light industrial land uses occupy a small portion of Calabasas. Altogether, 173 acres or 2.1 percent of the City is in business uses. An additional 92 acres of offices occur within the unincorporated portion of the General Plan study area north of the Freeway at Parkway Calabasas and along Calabasas Road. In addition, according to Table II-23 (see following section), approximately 81 acres of land within city limits, and an additional 68 acres in the unincorporated portion of the study area, is zoned either commercial or commercial planned development. However, this acreage remains undeveloped (i.e., vacant).

Although much of the office and retail development is recent, a number of emerging functional areas can be identified.

- Community retailing and office along Calabasas Road and Park Granada;
- Neighborhood retailing near the intersections of Mulholland Highway and Mulholland Drive in the extreme east and the intersection of Las Virgenes Road and Agoura Road in the extreme west;
- Corporate office along Agoura Road south of the Freeway;
- Office and light industrial north of the Freeway at Parkway Calabasas..
- Office and light industrial north of the Freeway at Las Virgenes Road.

A second corporate office concentration may emerge with the completion of the Kilroy-Ahmanson development north of the Lockheed facility between Calabasas Road and Park Granada Boulevard.

Public

Public facilities in the City of Calabasas include city, fire district, school district, and water district properties. They occupy 105 acres. There are four elementary schools, one middle school, one high school, one continuation school, and two private schools. In addition, there is one public park in the City of Calabasas. Also included in this category are the 1,164 acres of the study area dedicated to roads.

Open Land

There are four types of open lands identified:

- vacant, undeveloped,
- uncommitted open space,
- dedicated open space, and
- state/federal recreation areas.

Vacant/undeveloped land is land that either has been developed or is in the process of being developed for urban uses. It may be characterized by evidence of grading, site preparation, or other disturbances. In other instances, final approvals may have been granted, but there is no evidence of development. Uncommitted open space includes areas that may be developed in the future. For the most part they have not been disturbed, although incidental grazing or agricultural activities may have occurred on these properties. Characteristics of these sites may limit the use of these sites, however, there are no legal restrictions on the future development of undeveloped lands. Dedicated open space lands are areas that cannot be developed in the future. They include County park lands and lands owned by the Santa Monica Mountains Conservancy. State/federal recreation areas include the Santa Monica Mountains Recreation Area and State park lands.

Existing Land Use in the General Plan Study Area

Within the General Plan study area, the largest portion of unincorporated territory stretches southward across 8,626 acres of hills and canyons. The bulk of the land in the southern zone is privately owned and is largely undeveloped with low density rural housing at scattered sites along the few paved roads in the region. This land is designated as uncommitted open space on Figure II-2. The region also includes 984 acres of state and federal public recreation and conservation lands. The southern zone also includes the Soka facility, designated as public and quasi-public, on approximately 226 acres southeast of the intersection of Malibu Canyon Drive and Mulholland Highway. Soka is only partially built-up at present, though the possibility of future expansion has been raised by Soka. In addition, a small area of single family residential is located south of city limits along Mulholland Highway.

The study area northwest of the City contains the 374 acre Calabasas Landfill on state-owned land. Existing plans call for the landfill to remain active until no later than the year 2012. Afterwards, the land will be reclaimed for recreation and open space. Another 1,271 acres of open land north and west of the landfill includes a large expanse of the Santa Monica Mountains National Recreation Area, which is designated as state/federal recreation, the site of the proposed 494 acre Malibu Terrace development, and uncommitted open space. Because the Malibu Terrace development has not yet been approved, it is designated as uncommitted open space on Figure II-2. This area also includes small parcels of vacant and undeveloped land.

The unincorporated northern portion of the study area also includes the large gated single family residential community of Mountain View Estates located north of Mureau Road. Approximately 282 acres have been developed, with another 602 acres remaining as uncommitted open space. Other areas north of city limits, contain office uses, and a small parcel of vacant, undeveloped land.

A narrow strip of land northeast of city boundaries includes small areas of retail and office uses, public and quasi-public, uncommitted open space, and a relatively large area of single family residential uses.

The eastern portion of the unincorporated territory consists of 1,031 acres of steep slopes with scattered single family residential subdivisions, mobile home parks along Topanga Canyon Boulevard, and uncommitted open space.

EXISTING PLANS AND ZONING

Cal Poly Foundation Plan and Related Issues

The General Plan document prepared for the City of Calabasas by California State Polytechnic University, Pomona in 1991 identified a number of land use issues for the City and its General Plan study area. The following issues from the Cal Poly Plan pertain to the present General Plan process:

- Are development standards for areas of growth toward the southeast (Calabasas Highlands, Old Topanga, and adjacent areas) compatible with existing developments in that area?
- Are adequate hillside development standards being adhered to in areas of growth toward the southeast?
- Is there a need for natural habitat and wildlife corridor protection in the undeveloped central portion of the City (Calabasas Park West and the Enclave at Calabasas proposal areas).
- Is there a need for development controls to preserve natural habitat, oaks, ridgelines, and wildlife corridors in the undeveloped portions of the General Plan study area north of Mureau Road and south of the city limits?
- Is the development of the commercial and office land use in the vicinity of Agoura Road and Las Virgenes Road compatible with nearby residential uses?

Should developing areas in the General Plan study area to the north and west of the City (Mountain View Estates, Malibu Terrace proposal area) be annexed in order to protect the environment and avoid unsightly development?

Three additional land use issues may be raised to supplement those in the Cal Poly Plan:

- Should design standards for the commercial district along Calabasas Road west of Mulholland Drive encourage or discourage the "Old West" motif currently appearing on some of the buildings?
- What steps should be taken to coordinate land use in Calabasas and its General Plan study area with the policies of the Santa Monica Mountains Recreation Area?
- Would proposed expansion of the Soka facility be compatible with the environmental and land use character of the southern General Plan study area?

Zoning in the Study Area

The City of Calabasas adopted the Los Angeles County Zoning Ordinance upon incorporation. At the present time, there are twelve zoning categories in the study area (see Table II-22).

Table II-22
Zoning Categories
Calabasas General Plan Study Area
1993

Zoning	Calabasas	Unincorporated	Study Area
Agriculture	3,275	9,819	13,094
Commercial	234	84	318
Commercial Manufacturing	12	0	12
Commercial Planned Development	135	27	162
Manufacturing	0	69	69
Manufacturing Planned Development	32	16	48
Open Space	82	393	475
Residential	931	354	1,285
Residential Agricultural	39	0	39
Residential Planned Development	2,808	850	3,658

Table II-22
Zoning Categories
Calabasas General Plan Study Area
1993

Zoning		Calabasas	Unincorporated :::	Study Area
Resort ar	nd Recreation	13	0	13
Roads ar	nd Right-of-Way	711	453	1,164
Total		8,272	12,065	20,337

Source: Urban Research Associates, November 1992.

Although only a small portion of the City and study area is explicitly zoned as open space, a much larger area of protected open space is included in areas zoned as residential planned development. Key to the future development of the area will be the zoning applied to the land use category designated as "uncommitted open space" which is neither protected open space nor approved for development at the present time. The acreages in each zoning category for the uncommitted open space are indicated in Table II-23.

Table II-23

Zoning Categories for Uncommitted Open Space in Acres
Calabasas General Plan Study Area
1992

Zoning	Calabasas	County	Study Area
Agriculture	1,571	7,927	9,498
Commercial	11	41	52
Commercial Manufacturing	0	0	0
Commercial Planned Development	30	27	57
Manufacturing	0	0	0
Manufacturing Planned Development	0	0	0
Open Space	0	0	0
Residential	80	146	226
Residential Agricultural	2	0	2
Residential Planned Development	214	552	766
Resort and Recreation	13	0	13
Roads and Right-of-Way	0	0	0
Total	1,921	8,693	10,614

Source: Urban Research Associates, November 1992.

Based on the zoning of uncommitted open space, it is possible to calculate the growth that would occur if all the land were developed at permitted densities. Within the City of Calabasas, uncommitted open space would support an 1,690 additional dwelling units and an additional population of 4,500. Within the unincorporated areas, existing residential zoning would support an estimated 620 dwelling units and a population of 1,650 if developed to the maximum permitted densities. The unincorporated areas also include large areas of agricultural zoning whose future potential to support residential growth is uncertain. The actual growth occurring on these lands would depend on policy decisions related to development such as zoning changes and infrastructure.

Incompatible Land Uses

An important task for the General Plan process is to identify parcels where the current land use is not one normally permitted by the existing zoning of the parcel. Apparent discrepancies between land use and zoning within the City of Calabasas are indicated on Table II-24.

Table II-24
Land Use Categories
Calabasas General Plan Study Area
1993

Zoning Land Use Acres		
Agriculture	Retail	1
Agriculture	Vacant/Undeveloped	35
Commercial	Multi-Family	3
Commercial	Dedicated Open Space	14
Commercial Planned Development	Single Family	2
Residential Agricultural	Office	1

Source: Urban Research Associates, March 1993.

In addition, there are numerous instances of residential use where the current zoning map shows agricultural zoning. These uses may or may not be inconsistent with the zoning depending on the residential densities. Parcels where current zoning does not accurately reflect existing uses should be considered for rezoning.

Besides incompatibilities arising because of differences between existing zoning and use of a specific parcel, incompatibilities can also arise due to zoning and use conflicts between adjacent parcels. In the General Plan study area, the greatest potential for incompatible adjacent land uses occurs within areas adjacent to the state and federal recreation lands in the unincorporated portion of the study area. One example of potential incompatible land uses would be ridgeline or hillside development visible from within the recreation

lands. Such development is potentially permissible under the existing agricultural density zoning found throughout most of the unincorporated areas. Another example of potentially incompatible land uses would be the development of major traffic generators adjacent to the scenic recreation lands. Since these potential problems are located primarily within the unincorporated areas, the City can exercise only indirect influence in attempting to prevent the development of incompatible land uses. In some cases, it may become desirable for the City to annex additional lands so that it can have a more direct control over development.

INTERAGENCY LAND USE COORDINATION

Agencies involved in land use issues likely to affect Calabasas or be affected by developments in Calabasas include:

■ State of California: Malibu Creek State Park

Santa Monica Mountains Conservancy

National Parks Service: Santa Monica Mountains National Recreation

Area

Ventura County: Ahmanson Ranch proposed development

City of Los Angeles: Motion Picture Country House

County of Los Angeles: Proposed projects in the General Plan study

area

In addition, the study area is likely to be affected by the Topanga-Las Virgenes Resource Conservation District, Los Angeles County Regional Planning, and the Malibu Local Coastal Program.

Topanga-Las Virgenes Resource Conservation District

The Topanga-Las Virgenes Resource Conservation District is a State Agency that is involved in various forms of open space preservation in the Santa Monica Mountains. An area generally bounded by Encino, the Simi Hills, Pacific Palisades and Malibu makes up the District's jurisdictional service area. The District has no regulatory authority, and is only advisory in its official capacity.

The Topanga-Las Virgenes Resource Conservation District objectives include, but are not limited to resource management, environmental education, data collection and research usually for the California Department of Parks and Recreation (typically through various grant programs). District staff comments on development proposals (through environmental impact report review), provides revegetation expertise and oak tree policy assistance. Recently, the District managed the preparation of the Plan of Works for Malibu Creek Watershed which examines options for protecting the resources within the watershed area. The District also maintains a Memorandum of Understanding with the

City of Calabasas to provide monitoring services when oak trees are transplanted within the City. In addition, District staff is assisting the City with preparation of oak tree preservation guidelines as a companion to the City's oak tree ordinance.

County Regional Planning

The Los Angeles County Department of Regional Planning currently regulates land use in unincorporated lands in the General Plan study area through the implementation of the Malibu/Santa Monica Mountains Area Planning Program, Interim Area Plan. The plan was adopted in 1981 as an interim policy document to provide local refinement of the County General Plan. Although originally intended to remain in effect only until December 31, 1982, the plan continues to be an important planning tool. The Interim Area Plan addresses the entire Malibu/Santa Monica Mountains region and presents policy regarding environmental resources and recreation, transportation, public facilities and services and development.

The unincorporated areas surrounding the City of Calabasas fall under the Malibu/Santa Monica Mountains Interim Area Plan adopted by Los Angeles County in 1981. Approximately two thirds of the steep lands in the study area south of the City of Calabasas are planned for parks, with the remainder planned for very low density housing with one dwelling for every five to twenty acres. Most of the steeper land northwest of the City in the vicinity of the landfill is planned for similarly low residential densities. Closer to the Freeway north of the City, land is planned for residential densities of one dwelling unit for every one to two acres. Areas planned for business uses are located north of the Freeway at Parkway Calabasas.

The Department of Regional Planning is supervising the preparation of a new plan, entitled the Ventura Corridor Plan, to replace the Interim Area Plan. The objectives of the new plan will focus on amending the land use policy map in a manner that reflects current local and regional planning goals. Participants in the Ventura Freeway Corridor Plan include the County of Los Angeles, the incorporated municipalities in the planning area, the National Park Service, the Las Virgenes Water District and the Las Virgenes Unified School District. Each participant has contributed resources to the planning effort and will independently endorse the plan upon completion.

Local Coastal Program

The Los Angeles County Department of Regional Planning is also responsible for implementing the Malibu Local Coastal Plan/Land Use Plan (1986) for a five-mile wide planning corridor extending along the Malibu Coastline. The interior limits of the plan extend into the southern study area boundary, up to and including portions of Mulholland Highway. The Local Coastal Plan supersedes policy and planning efforts for the area overlapping with the Interim Area Plan. The general land use patterns in this part of the study area under the Malibu Local Costal Plan are outlined below:

- Specific park areas across southern portion of the study area;
- M-2 Mountain Land, one unit per 20 acres. Eastern one-third of study area and southern portion of study area south of park areas;

- Mix of Rural 1, one unit per 10 acres; Rural 2, one unit per 5 acres; and Rural 3, one unit per 2 acres across western two-thirds of study area;
- Large area of Residential 1, one unit per acre around Monte Nido;
- Strip of Rural 3 and Residential 1 along most of Mulholland Highway;
- Low Intensity Visitor Serving Commercial Recreation along east side of Las Virgenes Road south of Mulholland Highway; and
- Institution and Public Facilities at Soka site.

D. COMMUNITY DESIGN

The following section describes the existing community design of the study area. The baseline information which is provided depicts the existing natural and man-made elements within the study area. Certain prominent features of these elements are described and discussed relative to their desirability as a continuing component within the community. This data establishes the framework for the development of the specific issues which general plan policy will address.

The profile is divided into five discussion sections. The first provides an overview of the City and study area boundaries and a discussion of the design components within the study area. The discussion of the design components relates the functional and physical components, which are both natural and man-made, to the cognitive images that they create. This discussion then begins the development of future opportunities and constraints relative to such component related issues as entries, pathways, edges, ridgelines, neighborhoods etc.

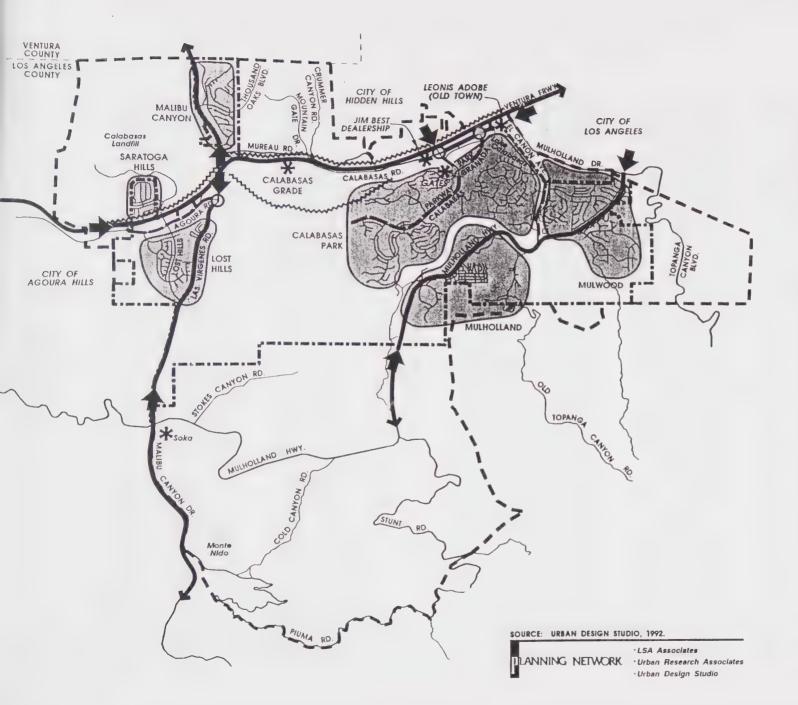
The second section describes the natural physical and topographic features of the study area and identifies their significance and desirability. This discussion leads into the third section which addresses the positive and negative man-made components within the study area. These components include residential and commercial development, roadways, streetscapes etc. The fourth section provides an overview of some of the existing regulations and ordinances adopted by the City to protect and preserve certain desirable design elements. The final section summarizes and discusses specific issues identified in the previous sections and in the Community Issues Report. This issues summary provides a basis for the future development of general plan goals, objectives and policies.

EXISTING CHARACTERISTICS

Existing Community Design Structure

Figure II-3 designates the study area and the City boundaries. It also pinpoints certain prominent urban design components within the study area. The following legend discussion is provided to clarify the map and point out the cognitive imaging and functional aspects of the designated design components. This exhibit demonstrates the overlap and interplay between single components with respect to their function, location, and visual importance.

The study area boundary extends beyond the City limits in several locations. The majority of the extended study area includes County land and is either visible from the city limits (such as the hills and ridges to the south along Mulholland Highway), or it is property which has major development proposals pending (such as the Enclave at Calabasas, Ahmanson Ranch, or Soka). One area to the northeast includes City of Los Angeles property which may be subject to future annexation by Calabasas. These areas are included as a part of the study area because of the possible implications of development or lack of development may have on the City of Calabasas.





CITY OF CALABASAS GENERAL PLAN

FIGURE II-3

URBAN DESIGN COMPONENTS MAP

LEGEND

-

CITY LIMITS



SPHERE OF INFLUENCE



MAJOR PATH



SECONDARY PATH



NEIGHBORHOOD



EDGE



ENTRY



LANDMARK



AUTO ORIENTED NODE





In addition to the city limits and study area boundaries, seven urban design components are identified. The following provides a description and a brief discussion of the components. Additional discussion of characteristics and issues is provided in the land use section (Section II-C), and the specific issues discussion at the end of this section.

Major Path

Mulholland Highway, Las Virgenes Road and the Ventura (101) Freeway are all identified as major paths into and out of the City and the study area. Mulholland Highway and Las Virgenes Road are similar in terms of their rural setting and design, their beach access and their adjacent residential developments. They are both scenic corridors. Portions of Las Virgenes Road have cluttered commercial development and signage. Maintaining the rural nature of these path while accommodating additional commercial and residential development and increased traffic will be a future challenge for the City.

The Ventura Freeway as a major path creates other such challenges. Although the Freeway provides a major entrance and exit for the City of Los Angeles, the view is almost entirely one of natural vegetation and undeveloped rolling hills through Calabasas. As stated in the Community Issues Report this view is cherished by the citizens of Calabasas. Nevertheless, increased development and traffic throughout the region will increase pressure to further develop the vacant land. The type and extent of roadway and related development within the study area requires careful future planning.

Secondary Path

The two identified secondary paths are Calabasas Parkway and Agoura Road. These two paths have very different characteristics. Calabasas Parkway is developed in a prominent urban style. The landscaped median dividing two lanes in either direction and large landscaped setbacks with fountains and entry gates along each side distinguish it from other roadways in the City. Calabasas Parkway is freeway accessible and functions as the gateway to many prominent gated residential communities. The continued function and design of this path as the access to private residential development provides some opportunities and constraints for future policy consideration.

Agoura Road has several freeway access points and accommodates a large amount of freeway truck and automobile traffic. Agoura Road connects to the most northern commercial service center in the City. These commercial services are used to a great extent by truckers and motorists as they enter and exit the region. Agoura Road's function as a major link to freeway accessible commercial services and the City's northern entry make it a prominent path with related future planning issues.

Neighborhood

Six separate neighborhoods are identified on Figure II-3. This figure illustrates the large percentage of land devoted to residential development compared to commercial or other uses in the City. All of the neighborhoods are connected to the Freeway by one of the designated primary or secondary paths within the City. In addition, the majority of these neighborhoods are single family developments. The Saratoga Hills neighborhood provides the only concentrated multiple family development in the City. Some issues related to this neighborhood are whether additional multiple family development is desirable and whether its location and design should be consistent with what presently exists. Details of issues related to the single family neighborhoods, such as lot size, density, or topography, will be discussed in the specific issues section.

Edge

For the purposes of this community profile, an edge is defined as a natural or manmade feature which functions to define the boundary or edge of an area. The two identified edges on Figure II-3 are the Ventura Freeway and the Calabasas Grade. Although these features are very different, they each act to visually and physically define the boundaries it encloses. The Ventura Freeway creates an edge along which most of the commercial businesses have developed. The Freeway also provides major access through the City and into and out of Los Angeles. The Calabasas Grade provides a visual edge and is the most scenic vista from the Freeway and also represents the preferred visual image of the City.

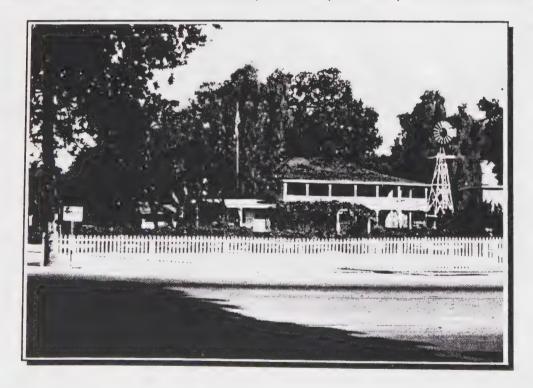
Entry Node

The identified entry nodes pinpoint access to and from the City via the Ventura Freeway, and all of the previously identified major pathways. One common characteristic of these entry nodes is that while they may be the major physical access points to the City, they are not visually identifiable. The only identifiable entry to the City is the landmark wagon which is located outside of the City in County land. Since the designated entry nodes include points where visitors are most likely to receive their first impression of the City, consideration to acknowledge certain entryway or initiate an entries program will be an important policy decision.



Landmark

A community landmark is defined as any natural or man-made element that has a strong community identity or sentiment connected with it. This connection does not always have to be a positive one, and often a community landmark is characterized by a strong negative feeling within the community. Of the four identified landmarks, some have strong positive sentiment, some negative and others have a combination of both connected with them. The Leonis Adobe in Old Town Calabasas is a landmark with a strong positive image. This landmark captures many of the desirable aspects of the City. It is simplistic, rustic, and rural. Old Town Calabasas and the Leonis Adobe represent the differentiation between Calabasas and its neighboring city, Los Angeles. In contrast, another identified landmark is the lushly landscaped gateway entrance to Calabasas Park. The characteristics of this landmark are urban rather than rural. This visual image is man-made, ornate and well manicured. It is characteristic of the type of residential development that lies beyond it. There is mixed sentiment in the community as to the positive aspects of this landmark.



One landmark, the Jim Best auto dealership appears to have a strongly negative sentiment connected to it, which is generally connected to the location and design of the dealership rather than its use. The scale of the development, the extent of signage and lighting, together with the minimal setbacks and landscaping, and the highly visible location, create an image which is contrary to the desired image of the community. The City's ability to capture opportunities from the strong sentiment connected with these landmarks will determine the future direction of each of their characteristics.

Auto Oriented Node

There are three auto oriented nodes pinpointed on the components map. All three of these nodes identify service commercial centers. The significance of the nodes is that they identify a location which presently caters to the automobile rather than pedestrian or other transportation methods. Each of the commercial centers are freeway accessible and function in a rapid service mode. They are not designed with pedestrian amenities and do not attract the leisurely shopper. The opportunities and constraints of these and future auto oriented commercial nodes should be a general plan policy consideration.

The Natural Environment

Calabasas has always been identified with the beauty of its natural environment: the rolling hills, oak woodlands, canyons, wildlife, and its overall rural character. While this character and natural beauty are still apparent, the encroachment of new development threatens to destroy the reasons many residents chose to live in Calabasas.

Entering Calabasas from the east, there is a sense of leaving metropolitan Los Angeles behind. Vistas become broader and the sight of undeveloped hillsides dotted with oak trees signals an exit from suburbia. A key element of Calabasas' character is the contrast between the intensity of the metropolitan area, and the openness and scenic beauty of the City's environment.



Oak Trees

Native oak trees, whether standing alone on a barren hillside or in woodland clusters, play a significant role in the Calabasas landscape. These trees provide a distinctive visual identity as well as valuable habitat for various animal species. In recognition of this importance, the City has enacted an Oak Tree Preservation Ordinance. (See Section 4, Existing Development Standards).

Topography

Visually, the study area contains some of the most scenic and diverse topography in the region. The beauty of its oak studded hillsides, peaks and ridgelines, canyons, and riparian woodlands all combine to create a feeling of openness and character that is essentially small town/semi-rural.

This scenic beauty and semi-rural atmosphere attracted most of the residents of the City, and the Community Issues Report strongly emphasizes the interest on the part of the residents to preserve the open space and protect the ridgelines, canyons and scenic vistas within the study area. However, the natural topography has been cut and filled to create buildable lots and man-made slopes in many areas of the City. In other areas, the natural terrain is being threatened because of the impacts of development intensity. Slope failure, improper drainage and other geologic stabilization issues have been increased because of the type and intensity of hillside development. In addition, along the Ventura Freeway, where the natural topography creates a gateway to the Santa Monica Mountains, roadside development and billboard advertising dominate the landscape.

Significant Ridgelines

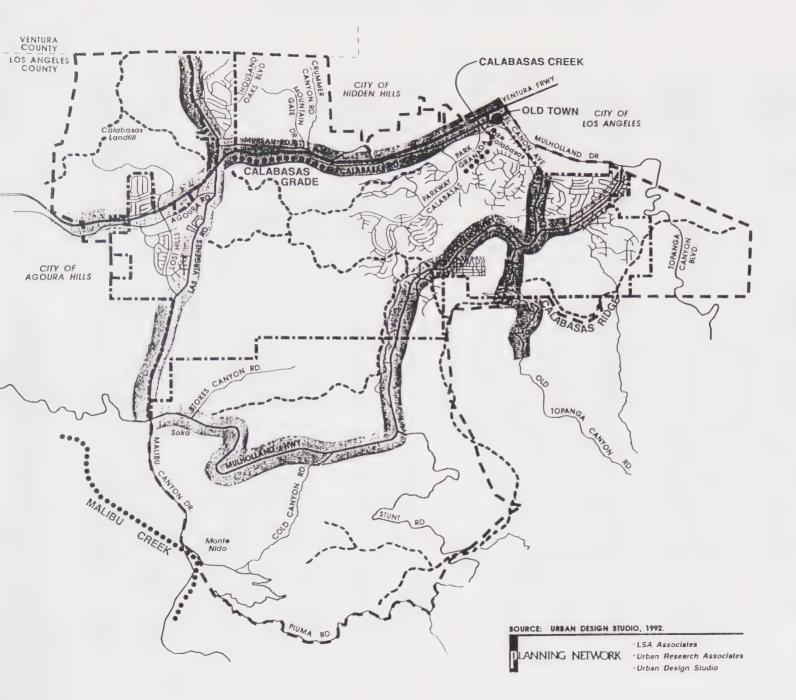
Views to distant ridgelines occur throughout the study area. The ridgelines serve as reference points and provide natural scenic backdrops for the viewshed in which they occur. Natural, undeveloped ridgelines affirm the City's semi-rural character. For these reasons, development directly on top of a significant ridgeline changes the City's image and hampers the enjoyment of the scenic corridors.

To aid in the appropriate management of ridgelines as one of the City's most important visual resources, significant ridgelines have been identified on Figure II-4, Scenic Features Map. A significant ridgeline is defined as one that visually dominates the surrounding landscape through its size; through its creation of a silhouette against the sky as a significant natural backdrop feature; through its proximity to, and view from, existing development; or through its ecological, historical or cultural importance.

Scenic Features

In addition to the general scenic beauty of the natural hillsides, canyons, and ridgelines that are a vital part of the City, there are other specific local geographic features and scenic places which stand out in the landscape and help define the City's unique character. The following list of features has been identified as warranting special concern as to their protection from future development. (see Figure II-4, Scenic Features Map).

- Calabasas Grade -- An area along the 101 Scenic Corridor extending from the Las Virgenes Road to the Mureau Road overpass. It is the most scenic section of the Freeway within the study area.
- Calabasas Ridge (Summit to Summit Ridge) -- The highest landmark ridgeline of the City along the southern border with upper Topanga Canyon, including rich riparian areas with heritage oak groves along the base of the ridge that have not burned in over one hundred years. It is a visual landmark within the study area.
- Calabasas Creek -- With headwaters and tributaries in the Old Topanga and Mulholland Scenic Corridors, this year-round stream cuts across the City south to north, flowing through various park-like areas and outflowing to the Los Angeles River.
- Malibu Creek and Tributaries -- With headwaters and tributaries in the Las Virgenes Valley, this creek cuts through the City in a north/south manner and outflows to Malibu Lagoon.





CITY OF CALABASAS GENERAL PLAN

FIGURE II-4

SCENIC FEATURES

LEGEND

1

CITY LIMITS



SPHERE OF INFLUENCE



SIGNIFICANT RIDGELINES



SCENIC CORRIDORS



SIGNIFICANT FEATURES





Scenic Corridors

Much of what forms the visual image of Calabasas comes from what is seen from motor vehicles. At present, this image is one of rugged terrain, oak woodlands, ridgelines, and canyons as viewed from the majority of the City's major streets. Exceptions to this occur along the Freeway where billboards and other commercial signs interfere with the view of the hillsides and along the Las Virgenes commercial section where the clutter of signs also dominates the view.

The need to protect scenic corridors has been recognized by the City. The City has enacted a Scenic Corridor Ordinance which currently identifies four scenic corridors (see Figure II-4).

- The Mulholland Highway Scenic Corridor extends from Mulholland Drive through the unincorporated portion of the study area to Las Virgenes Road. As with all the City's scenic corridors, the viewshed includes both rural and urban areas. The corridor contains a diverse topography, including sandstone hills and ridges, immense granite outcrops, stream and riparian habitat, and open areas of rolling meadow and oak woodland.
- The Las Virgenes Scenic Corridor is a key cross-mountain roadway that provides primary access to the Malibu Creek State Park area and the Pacific Coast. Dominant features include rolling hills, oak woodlands, and primary wildlife linkage along Malibu Creek and its surrounding wetland habitat.
- The Old Topanga Canyon Scenic Corridor extends from the urban residential area north of Mulholland Highway to its ascent of the Calabasas Ridge into the coastal zone of Topanga Canyon. The rural portion provides an interior route through the Santa Monica Mountains and contains some of the most scenic vistas of the inland valley, steep canyon walls, and a year-round watershed that fosters a riparian setting and a vigorous oak canopy.
- The 101 Scenic Corridor is a heavily travelled, high-density corridor that encompasses much of Old Town Calabasas, Calabasas Road, and the Calabasas Grade. Beautification of the existing five hundred foot corridor, and preservation of significant ridgelines, rolling hills, and oak woodlands are of concern here. Existing negative aspects of the corridor, such as freeway oriented signs and uses, are also a concern.

EXISTING LAND USES

The development pattern in the study area is one of primarily low density residential character with concentrations of commercial and office development adjacent to the Freeway corridor. Uses are segregated into several general types of development (see Figure II-1):

- Rural Residential:
- Single Family Residential;
- Multi-Family Residential; and
- Business and Public Uses.

Rural Residential

Generally, two categories of single family development can be identified: the more traditional single family tract development and the rural custom home development.

Rural residential development is mostly located in the study area's southern portion along canyons and in the hills. Architectural styles vary widely and landscaping is informal or natural. Streets are typically two lane paved roads without curbs or gutters. Drainage is usually not improved, tending toward a more natural approach.

Some of the more recent additions to the rural category are large custom estate homes on large lots while others are large homes on smaller, more traditional size lots that tend to crowd their older, smaller neighbors. This is especially true in the southern mountain areas that were subdivided 30 to 40 years ago for vacation homes.

The majority of these hillside "cabin lots" remain undeveloped; however, where development has occurred, it is intense for the terrain and lot size. The construction of 4,000 square foot homes side by side on these steeply sloped lots threatens the stability of the slope, and visually impacts the rural hillside beauty. In addition, the rural roads are impacted due to a lack of sufficient improvements. The continued development of these large homes on such steeply sloped small lots along unimproved roadways will likely necessitate hillside grading and other geologic stabilization methods. In addition, roadway, drainage and other public improvements will be required.

Single Family Residential

Within the study area, single family residential tract developments tend to be relatively small residential enclaves constrained by natural barriers such as steep slopes and canyons. Many of the tracts (including custom home subdivisions) have been developed as private access, gated communities surrounded by walls with only one or two main access roads. This pattern of development further restricts inter-neighborhood connections and creates inwardly focused neighborhoods.

The traditional single family residential developments, such as those along Parkway Calabasas, include full urban improvements. They are usually characterized by elaborate entry statements, often with gates and guard houses. Homes in these areas were generally constructed at the same time and have similar/identical architectural styles with formal landscaping. This type of development stands in sharp contrast to the more rural, less formal development style that was not constructed en masse. In tract development, as in other recent residential development, the continued construction of homes along the tops and down the slopes of ridgelines, substantially changes the vistas inherent to the beauty of the area as well as the slope stability.



Multi-Family Residential

Multiple family higher density residential development tends to be concentrated in the Malibu Canyon, Lost Hills, and eastern Calabasas Park areas. Some are well planned; however, others especially in the Malibu Canyon area, offer few amenities, lack sufficient landscaping and setbacks from the street, and provide little architectural interest and detail.



Business and Public Uses

The design of a city's commercial architecture plays an important role in determining its character. For example, taller buildings with flat roofs and glass facades create an urban image, while one and two story buildings with low pitched roofs, exterior balconies, multiple paned windows, and wood trim suggest a more relaxed, semi-rural character. At present, Calabasas contains a mixture of both, with the current trend leaning more toward an urban image.

Commercial/office/industrial development within the study area can be generally categorized into three types:

- Freestanding and strip mall developments along the Freeway;
- Business park uses along Agoura Road; and
- The Old Town commercial district.

Commercial strip development in the study area varies. Some, particularly the newer projects along Calabasa's Road projects a positive image of the City. Other projects, such as the development at Lost Hills Road are typical of similar development throughout Southern California: parking adjacent to the street with little or no screening; minor landscaping; large, vehicle oriented signs; frequent temporary signs; and visible storage areas and mechanical equipment.

The business park uses along Agoura Road, and to a lesser extent along Mureau Road and Calabasas Road, generally provide a positive image for the City. Primarily, buildings are set back from the street with ample landscaped areas and screened parking; signs are kept to a minimum; entrances are well marked and kept to a minimum. However, internal circulation is sometimes tight and confusing, and the high profile, box-like architecture of some projects detracts from the community's otherwise small scale image.

The Old Town commercial district provides the most significant representation of early California architectural styles in the study area. The Leonis Adobe is the principal historic structure within the study area. The Adobe's design is classical Monterey Style and incorporates all of the traditional features of this architectural style including: a low-pitched, full roof; second story balconies with wood railings; and symmetrical placement of windows and doors. Another example of early architectural styles in the area is the Krammer Store. The store's design is typical early 1900 commercial vernacular.



These buildings are typical of the preferred image for the City of Calabasas. In sharp contrast to these, the Home Fed building located directly adjacent to the Leonis Adobe does not represent this image. The architecture, materials and scale of this building are inconsistent with surrounding structures.

The development of public and quasi-public uses in the study area is characterized by a lack of concentration and focus. This is primarily because Calabasas is a newly incorporated city and has not yet developed a civic center as the primary focal point for community services and facilities. Present facilities are scattered and isolated, and therefore, do not provide a symbol of community identity.

EXISTING STREETSCAPES

Another aspect of public development within the study area is "streetscape." Streetscape includes all of the elements that make up the public right-of-way. These encompass all physical improvements and equipment used in outdoor spaces for security, traffic control, housekeeping, and amenity.

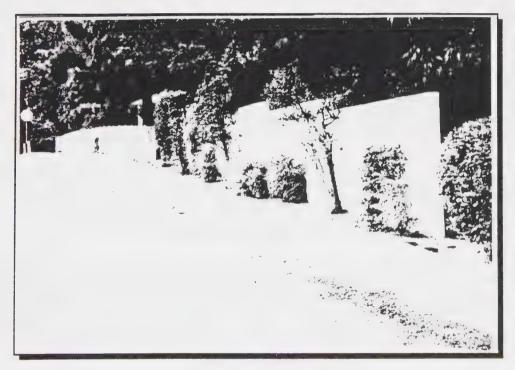
The streetscape environment has resulted from the application of Los Angeles County standards. These standards, established for streets, sidewalks, parkways, landscaping, lighting, and signage, have changed over time. This has resulted in a wide range of streetscape attributes. Furthermore, there are cases where private development has provided amenities above and beyond the standards themselves.

There are three general types of existing streetscape throughout the study area:

■ The fully improved four lane with landscaped median and extensive landscaped setbacks. The setbacks feature planted gateways complete with fountains, gates or walls. This urban look is typical of Parkway Calabasas.



- The uncurbed rural roadway which features the continuation of the natural terrain from the hillside right down to the roadside. Mulholland Highway or Calabasas Road in Old Town are examples of this streetscape. It is typical of the desired rural look for the City and study area. It provides adequate improvements and complements the surrounding landscape.
- The generic suburban streetscape. This streetscape is characteristic of any street anywhere. It features curb, gutter and sidewalk or curb, gutter and parkway. There are numerous variations on the width of the sidewalk or parkway, but the standard design is five foot parkway and/or 10 foot sidewalk. The variations in the study area are mostly contributed to the changes in county standards over time. This suburban style is adequate in areas where there is no desire to emphasize a specific style. Examples of this streetscape can be found through the residential tracts in Calabasas.



Street Landscaping

In general, landscaping along the study area's streets is differentiated between residential and commercial/industrial areas. Residential neighborhoods contain the greatest amount of street trees and parkway vegetation. One of the area's best examples is Parkway Calabasas. Commercial corridors vary substantially in the type, amount, and quality of existing landscaping.

Paving

Streets throughout the study area are paved with asphalt. These are generally maintained in good condition. Concrete curbing lines most streets with adjacent development. An exception is the southern, more rural portion, of the study area. Sidewalks are not consistent in their occurrence or width within the study area. The newer sidewalks have incorporated a street tree program.

Street Furniture

Street furniture occurs along some sidewalks in the commercial corridors. Generally, this is limited to bus benches, news racks, and telephone booths. Bus benches are of a typical design, using wood backs that support off-site advertising on their concrete frames. In the Calabasas Park area, benches are a simple backless design in solid concrete.

Street Lighting

Municipal street lighting is located throughout the study area. Semi-rural areas often contain "edisons" or fixtures attached to electric transmission poles. Most areas are illuminated by conventional cobrahead light standards. Currently, the City is using composed aggregate posts with cobrahead fixtures.

EXISTING REGULATIONS

The form, and to some extent, the architectural design of the urban environment is largely the result of standards and regulations imposed on new development. The Los Angeles County Zoning Ordinance has been the primary document used to regulate development in Calabasas. Upon incorporation, the City adopted the County's Zoning and Subdivision Ordinances pending completion of its own development standards.

After incorporation, the City enacted three ordinances aimed at more effectively controlling development within the City's three most sensitive areas - Old Town Calabasas Overlay Zone, the Scenic Corridor Ordinance, and the Oak Tree Ordinance.

Old Town Calabasas Overlay Zone

The Old Town Calabasas Overlay Zone was established to preserve and promote the Old West architectural style within the Old Town area. The overlay was established to ensure consistency with the Western theme and compatibility with existing land uses in terms of use, intensity, architectural design, pedestrian level activity, and preservation of natural resources such as oak trees and Calabasas Creek.

Scenic Corridor Ordinance

The purpose of the Scenic Corridor Ordinance is to identify the City's designated scenic corridors, establish required development processing procedures, and provide required findings for project approval based on a set of design guidelines. The Ordinance recognizes and defines the differences between particular corridor sections that may be essentially rural and those that are developed, or urban. Special attention needs to be given to transition areas (areas on the fringe of urban areas) to ensure that development does not sprawl into rural areas.

According to the ordinance, a rural area is characterized by low-density residential, and non-commercial development, with a predominance of open space and natural terrain. Goals for rural areas include maintaining the natural physical environment and topography, especially features such as ridgelines, hilltops and hillsides, streams and surrounding riparian areas, wildlife habitat and linkages.

The ordinance also specifies that an urban area is characterized by high-density commercial/industrial or residential development separated by areas of open space. Goals for urban areas include preserving the remaining oak woodlands within a corridor's viewshed, and developing a beautification program to improve the landscaping quality within commercial areas.

Oak Tree Ordinance

The Oak Tree Ordinance sets forth the City policy to define a specific entity for management and enforcement responsibility to protect oak trees in the City. The Ordinance requires reforestation, registration, and preservation of all healthy oak trees, unless reasonable and conforming use of the property justifies the removal, transplanting, altering, and/or encroachment into the oak tree's protected zone. The Ordinance requires an Oak Habitat Preservation Program be established to provide for reforestation and replacement of woodlands, public acquisition of woodlands, and public education regarding habitat preservation.

Site Plan and Development Review

Since incorporation, the City has also enacted a Site Plan Review Ordinance and a Development Review Process. They currently provide the regulatory standards, design guidelines, and procedures for the review of all development projects in the City including buildings' exterior appearances.

Art in Public Paces Ordinance

The Art in Public Places Ordinance was developed to provide aesthetic enhancement and enrichment of the community by the inclusion of fine art throughout the City. The goal is to provide a collection of nationally recognized, permanent outdoor sculpture to be enjoyed by all.

Any person constructing or reconstructing a commercial building must provide a sculpture or other art work, as approved by the Art in Public Places Committee. All pieces must be of monumental scale in proportion to the size of the buildings. If the installation of art is impractical or inaccessible, the developer will contribute the assessed fee of 1% of the building valuation (maximum \$150,000) to the Art in Public Places Committee, These fees will then be used to purchase art for other public places in Calabasas.

SPECIFIC URBAN DESIGN ISSUES

The purpose of this section is to summarize some of the dominant issues which have surfaced from the discussions provided. Responses to these issues will set the direction for some of the goals, objectives and policies for the City's General Plan.

Scenic Vistas/Natural Terrain

The rolling hillsides and valleys covered in natural vegetation have contributed greatly to the City's character and identity. The scenic vistas, ridgelines, corridors and open space within the study area represent a commodity that is cherished by the citizens of Calabasas. The preservation of these commodities is in competition with the likelihood of future development.

Small Lot Development

Development of 40 foot wide "cabin lots" with large homes that completely fill the buildable area permitted under County zoning, has created safety concerns and impacted hillside beauty.

Freeway Corridor

The Ventura Freeway corridor is the first visual impression most visitors receive. Within the corridor viewshed one is immediately impressed by the scenic terrain and open space. There are, however, several existing elements within the corridor which do not contribute positively to the City's image. Billboards and large commercial pole signs block views from the corridor and stand in sharp contrast to the surrounding hillsides (Recently the removal of two of these signs was approved by Los Angeles County. Near the Freeway, commercial signs tend to become larger and taller as they compete for the attention of passing motorists. The commercial area on Las Virgenes Road at Agoura Road has been identified as an area where signs appear to be very numerous, and the sign clutter tends to create a negative image for the City.

In addition, commercial development along Calabasas Road provides a view of the backs of commercial buildings from the Ventura Freeway. The only concern given for this view are the signs tacked onto the building backs to advertise the commercial services in front. Also the Jim Best auto dealership looms into view. The scale of this development does not complement other development in the City.



City Entries

Major entrances to the City occur at the following locations:

- Calabasas Road at the eastern city boundary;
- Agoura Road at the western city boundary;
- Parkway Calabasas at the 101 Freeway;
- Las Virgenes Road at the 101 Freeway and at the southern city boundary; and
- Mulholland Highway and the City boundaries.

At present, none of these locations presents a significant visual entry statement with the exception of the "Welcome to Calabasas" sign on the western wagon at the east end of Old Town (outside the City's boundary).

All of the above locations offer opportunities to provide quality entry statements that will indicate entry into the City of Calabasas.

E. HISTORIC, ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

This section examines historic, archaeological and paleontological resources for the Calabasas General Plan study area. Figure II-5 indicates areas of potential historic value based upon archival information such as old editions of USGS maps. early survey maps, and known directories of historical sites.

HISTORIC RESOURCES

The history of the area now encompassed by the City of Calabasas and its General Plan study area can be viewed in phases, some chronological and some topical. Each phase is independent and important to an understanding and appreciation of the local history of Calabasas. The phases include the pre-contact period of Native American settlement, the era of Spanish exploration, the Mexican rancho period, the Calabasas area during the Old West period, and modern times, when the Calabasas area become a recreational retreat, an outdoor set for films and television, and an artists' colony.

The Chumash

The first known inhabitants of the area that now encompasses the City of Calabasas, California, and its General Plan study area were the Chumash Indians. This highly organized tribe, whose territory stretched from the Los Angeles basin to Gaviota, took advantage of the mild climate and abundant flora and fauna to supply a wide variety of food and building materials. It is possible that the name "Calabasas" is derived from the Chumash name for the area, and means "where the wild geese fly".

The Chumash were skilled in hunting and fishing. They had permanent villages throughout the region, connected by well established trails. The main trail spanning Chumash territory passed through Calabasas. It later became El Camino Real, the principal north-south route used by the Spanish.

The European Explorers

Although Juan Cabrillo, a Portuguese navigator funded by the Spanish monarchy, set foot in Southern California at Point Mugu in 1542, extensive European contact with the Chumash did not come until the 18th century. During 1769 and 1770, the Spanish explorer Gaspar de Portola led an expedition that traversed a coastal route between San Francisco and San Diego. On their return south, the explorers came through the Agoura Hills and, consequently, near the site of Calabasas.

Between August 1775 and March 1776, Juan de Anza led a contingent of 240 men, women, and children on a journey from Horcasitas, Mexico to Mission San Francisco for the purpose of establishing a community in Northern California. The 1,500 mile journey took seven months to complete. On February 22, 1776, the second night out of Mission San Gabriel, Anza's party camped in the mountains along Las Virgenes Creek at Agura Escondida, just west of Calabasas (the current site of the Coco's Restaurant at Las Virgenes Road and the Ventura Freeway).

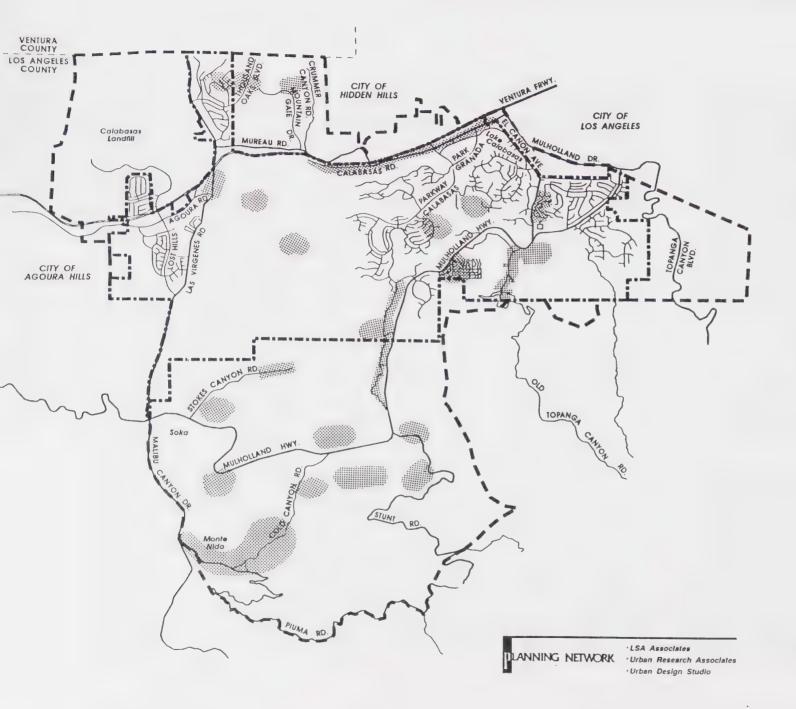




FIGURE II-5

AREAS OF POTENTIAL HISTORIC SENSITIVITY

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



AREAS OF POTENTIAL HISTORIC SENSTIVITY





One member of the Anza journey, Bartolo Tapia, returned to Calabasas 25 years later to establish the first European settlement in the area, a cattle ranch. His rancho, the El Escorpion, encompassed most of the area. During the 1830s, the El Escorpion Rancho was granted to three Chumash inhabitants of Calabasas. One of the daughters of the grantees, Espiritu, inherited the ranch, and married a rancher of Basque descent, Miguel Leonis, in about 1860. Leonis, who took control of the 1,100 acre ranch, expanded his holdings and warded off squatters with hired guns and violence. Meanwhile, bandits, such as Joaquin Murietta and his gang, kept hideouts in the Monte Nido Valley, launching raids against Leonis, other settlers, and travelers during this period. Leonis resisted their cattle rustling and raids with equal force. In 1889, Leonis died in a wagon accident, but he and bandits like Murietta left a legacy of violence and property disputes that marked the history of Calabasas in the late 1800s.

The Old West

As the large ranches of the region were divided into smaller farms during the late 1800s, the character of Calabasas changed to that of a pioneer town of the American West. As with thousands of other towns that sprang up before the turn of the 20th century, Calabasas was built by individuals who saw a need and acted upon it. Stagecoaches traveling from Los Angeles to San Francisco stopped in Calabasas, traversing the same route that the Chumash and the De Anza party used to travel through the area. Along the El Camino Real and what later became the Ventura Freeway, the "Old Town" of Calabasas was born. A combination general store and post office was built before the turn of the century. The location of this enterprise was the homestead of Isaac Ijams, one of the early pioneers of Calabasas.

Other stores joined the general store and post office. In 1901, for example, Lawrence Kramer moved an existing building in Oxnard over 30 miles of twisting dirt road to Calabasas to set up the Kramer Store. The Kramer Store remained in business for over 60 years in Calabasas, and remains standing in downtown Calabasas to the present day. Some of the other stores, however, did not fare as well as did Kramer's. The Kimball Store, for example, closed and was demolished long ago. The proprietor of the Kimball Store, Frank Kimball, was killed in an altercation in his store, as was another store owner, Mike Lordon. In contrast, the Cooper Store, a two story building on the west side of Mulholland Highway just south of Calabasas Road, was converted into Hunters' Inn, a hotel for travelers and sportsmen.

The Leonis Ranch was located near the general store and post office. The Leonis Adobe and accompanying ranch buildings were constructed about 1844. When Miguel Leonis moved in during the 1870s, he remodeled the adobe in the Monterey style. The Leonis Adobe was almost demolished in 1962, when Kathleen Beachy purchased it and secured the adobe as the first Historical Cultural Monument of the Los Angeles Cultural History Board; in 1975, it was listed on the *National Register of Historic Places*.

The Old West days of Calabasas earned the town of Calabasas its reputation as "California's tough town." From the ruthless tactics of Miguel Leonis, "King of Calabasas," to the raids of bandits like Joaquin Murietta, and the high risk business of storekeeping, the legacy of Calabasas as "the last of the Old West" is revealed. Gunfights, robberies, range wars, stagecoach runs, and pioneer businesses all left an indelible mark on Calabasas during the days of the Old West.

A Recreational Retreat

The increasing population and prosperity of Southern California brought changes to Calabasas in the early 1900s. Because of its natural beauty, the Calabasas area became a popular retreat for people living in and near the growing City of Los Angeles. Weekenders would motor out on the El Camino Real to take advantage of the rustic Santa Monica Mountains, with their cool waters for swimming and fishing. The first organized retreat was Crater Camp, near the intersection of Cold Canyon and Piuma roads. The camp, over 400 acres in size, opened for business in 1914. Owned by one of the original Calabasas homesteaders, Crater Camp became a year round camp and picnic ground, with tent houses, cabins built along Cold Creek, and a restaurant that was part of the old homestead ranch house. Recreational activities added over the years included skeet and target shooting, canoeing and rowboating, and swimming in a "swell pool" created by a small dam on Malibu Creek. Crater Camp remained in operation until 1949, providing a place for rustic recreation for thousand of people. One of the last events at the camp was a motorcycle race on a dirt track that attracted nearly 7,000 spectators in the summer of 1949.

The last proprietor of Crater Camp, Arden Matthews, wanted to continue the rustic retreat tradition of the area that had come to be called Monte Nido. His idea was to build a lodge in the area, with good food and entertainment for locals and passers-by. Purchasing 27 acres bordering Crater Camp, Matthews and his wife moved the store and house from the old camp to the new site. By the summer of 1950, Saddle Peak Lodge, overlooking the Monte Nido Valley, was open for business. The decor and surroundings were rustic with an Old West theme. Saddle Peak Lodge, offering good food and fellowship, attracted locals and notable celebrities, including opera singer Mario Lanza, baseball manager Casey Stengel, and actors John Huston, Evelyn Keyes, Richard Basehart, and Ronald Reagan. Although operated by several different owners subsequent years, the lodge has maintained the rustic charm envisioned by its builders, and is an important landmark of the Old West for the Calabasas area.

Another chapter in Calabasas history surrounds Kennedy's Trout Pond. During the 1920s, a homestead in Monte Nido was purchased by Colonel McCoy, who built a stone house and a trout pond on the property. The trout grew for some 30 years before the property was purchased by Bill and Mary Kennedy, who opened Kennedy's Trout Pond. Beginning in the 1950s, families from throughout Southern California have visited the pond in hopes of catching a trout for dinner. The Kennedy's built a refreshment shed with picnic supplies, food, and bait for sale, and fishing tackle for rent. The Kennedys have donated one day a year to children with muscular dystrophy, and a day for children at the Braille Institute. Over the years, Kennedy's Trout Pond has provided city kids with a chance to go fishing in a scenic and rustic setting.

Monte Nido

Accompanying the emergence of the area as a recreational spot was the development of the retreat community of Monte Nido. Those who came to Crater Camp in the 1910s and 1920s found the healthful environment and beautiful scenery pleasing. Physicians and other professionals from the Los Angeles area brought cabin sized lots along Cold Creek and Dark Canyon, and built get away cabins in the remote mountain setting. The name, "Monte Nido" (mountain nest), is credited to Al Reithe, an artist who built a home at the intersection of Whittemore Drive and Reithe Avenue. Reithe's home was a showplace, and his guests there included Mac Sennett, creator of the Keystone Cops and other slapstick silent films. A fire in 1943 destroyed the Reithe home. Like another famous landmark, the Monte Nido Inn, all that remains of the Reithe home is a chimney.

As County roads began to cut through the area in the 1920s and 1930s, Monte Nido become a community of greater size, less isolated, and therefore attracting year round residents. The need soon arose for fire protection for the remote Monte Nido area. In 1937, Los Angeles County acquired about one acre of land on the corner of Cold Canyon and Piuma roads for the purpose of constructing a fire station. Patrol Station No. 67 had structures built by the County, but all other facilities were built by the California Conservation Corps. The men who worked at the station had many duties beyond fighting fires. They were the game wardens of the area, and helped to maintain telephone lines and municipal water facilities. The station was the command center for fighting many of the huge brush fires that periodically struck the Calabasas area. During World War II, the firemen also had the duty of watching the coast and the skies for enemy attacks. Patrol Station #67 stands today, and is a landmark in Monte Nido history. While Monte Nido has changed over the years, it has maintained its rustic character, and some of the homes, cabins, and other buildings there are living reminders of the recreational heritage of Calabasas.

Film Making in Calabasas

As the film industry left New York State during the second decade of the 20th century, it gravitated to the favorable climate and varied topography of Southern California. Movie studio owners, located in and around Hollywood, found ideal locations for a variety of outdoor settings in the Calabasas area, especially at the Warner Brothers Ranch west of the town. The area was especially good for Westerns. The first film shot in the area was a 1915 feature starring Hoot Gibson, followed by several more Westerns. In 1922, the same set was used for a Mary Pickford film.

During the 1930s, Metro Goldwyn Mayer filmed numerous Tarzan movies starring Johnny Weismuller and Maureen O'Sullivan along Crater Camp Drive. The Tarzan set, including the "Tarzan Tree," was located on the corner of Crater Camp Drive and Meadows End Drive. Monte Nido was used for other jungle films because the area was easily converted into a tropical setting complete with waterfalls. Along Calabasas Creek, portions of the films, "The Adventure of Robin Hood," "Stalag 17," and "Juarez" were shot. West of Monte Nido, the outdoor scenes become the settings for Wales in "How Green Was My Valley," for China in "The Sand Pebbles," and for a barren desert in "The Planet of the Apes".

Saddle Peak Lodge provided the setting for additional films. Jayne Mansfield, Dan Dailey, Ray Milland, and Jean Hagan all starred in films produced in part at the rustic lodge. As variety of television programs were also filmed in the Monte Nido area, including episodes of "The FBI," "The Fugitive," "Peyton Place," "Perry Mason," and "The Invaders." The Calabasas area is rich in the folklore of Hollywood, and has been the scenic backdrop for many famous films and television programs.

Reflecting the area's involvement in film making, the Motion Picture Hospital is also located in the northeastern part of the General Plan study area, between Mulholland Drive and El Canon Avenue, in the City of Los Angeles.

Park Moderne Artists Colony

In the late 1920s, the first residential subdivision of Calabasas was created. In a wooded area one mile south of Calabasas, two individuals, C. Henry Taylor and William Lingenbrink, acquired 140 acres of the Cooper Ranch east of Old Topanga Canyon Road for the purpose of building an artists' colony. Lingenbrink, a patron of modern art, commissioned Rudolph Schindler, an avant-garde architect, to design two of the community buildings, and Jock Peters, designer of the interior of Bullocks-Wilshire Department Store, was commissioned to design the colony's clubhouse. Meandering lanes and streets named after birds characterize the "bird tract" that was dedicated in 1931 as "Park Moderne".

Over the next few years, artists, authors, and actors built homes in Park Moderne. Schindler and Peters designed several of the homes, as well as the grounds, which included footpaths, fish ponds and fountains. Famed artists, such as woodcarver Andy Anderson who built and hand carved his own home, came to Park Moderne. Dutch born avant-garde architect Jan de Swart became one of the first residents of Park Moderne, moving to the colony in 1930 and living there until the 1950s. The wife of comedian Jimmy Durante spent a great deal of time at Park Moderne. Durante's closing comment on his 1950s television program: "Goodnight Mrs. Calabash, wherever you are!" referred to his wife and her love for the Calabasas area. While some of the buildings have been altered over the years, and only one footpath and fountain remain, Park Moderne is still an artists' colony today. Several houses, the community building, the fountain, and an art deco wellhouse are testaments to this phase of Calabasas history. The colony reflects the history of Calabasas as a rustic and beautiful retreat, and much remains of the architecture of Rudolph Schindler and Jock Peters. Park Moderne is currently located east of Old Topanga Road, approximately one mile south of the intersection of Old Topanga Road and Mulholland Highway, beginning at Bluebird Drive.

ARCHAEOLOGICAL RESOURCES

Physical Characteristics of the Area

The Calabasas General Plan study area also includes 66 recorded Native American open-air sites and rockshelters, temporary, special use sites and villages, that span the time period from at least 3,500 B.C. to the historic period. Sixty-two of the archaeological sites date to the prehistoric period, and four of the archaeological sites date from the historic period. Below are described the physical characteristics of the area that would have made it conducive to prehistoric settlement. This description is followed by a brief history of prehistoric settlement in Southern California. A glossary of archaeological terms used is included in Appendix A. By law, archaeological site data is confidential information, and will be kept on file at the City. A brief descriptive summary of the 66 archaeological sites is included in Appendix A. Figure II-5 indicates areas of potential historic sensitivity in the study area.

Both the physical conditions and available resources combine to create an excellent environment for pre-historic occupation of the Calabasas area by native Americans. This is evidenced by the extensive number of recorded prehistoric sites that have been documented throughout the study area. Topographically, it is characterized by hilly and mountainous terrain bisected by a major north-south drainage channels, Las Virgenes Canyon, and several lesser drainage areas that provide many freshwater sources. The Las Virgenes and Liberty Canyons have relatively broad alluvial valleys along the western portion of the project area, and McCoy Canyon opens out as it reaches the lower eastern slopes of the mountains. These open and flat areas were ideal for native people to live.

Although historic and recent land use has altered the environment considerably, five major plant communities are present in the project area that would have existed and been the source of important resources in prehistoric times. These plant communities are chaparral, coastal sage scrub, grasslands, southern oak woodlands, and riparian, and are briefly described to provide perspective of how the native Americans utilized the resources in their everyday lives. Complete descriptions of these plant communities are found in Section IV, Environmental Resources.

Chaparral

The native populations used several species of the chaparral or woody evergreen shrubs found in the foothills around Calabasas. In particular, the scrub oak (*Quercus dumosa*), the manzanita (*Arctostaphylos* spp.), toyon (*Hetermoeles arbutifolia*), and sugar bush (*Rhamnus crocea*) provided abundant food sources and medicine for the prehistoric people. The berries of the sugar bush were dried and later soaked in water and heated for a hot tea drink, while the leaves were often used in a tea to treat colds. The berries of the toyon bush were also a source of food and medicine. A wash or lotion of manzanita leaves provided relief from poison oak rashes.

Coastal Sage Scrub

The coastal sage community also provided food, drink, and medicine plants for the early inhabitants. These included the California sagebrush (*Artemisia californica*), sages (*Salvia* spp.) and buckwheat (*Eriogonum* spp.). The chia seeds (sages) and buckwheat seeds were ground for a tasty meal, while the sagebrush leaves were used for medicine.

Grasslands

Native grasslands on fairly level terrain contained perennial grasses such as needle grass (*Stipa* spp.) bluegrass (*Poa* spp.), and herbaceous natives such as owl's clover, blue dicks, and blue-eyed grass (*Sisrynchium bellum*). These all provided food for the early inhabitants. The bulb of the blue dicks in particular were considered an important source of pourishment.

Riparian

The early inhabitants used several riparian plants found in the wet areas of the woodlands for basketery, structures, cordage, and arrow shafts. These plants included the willow (Salix lasiolepis), and mulefat (Baccharis glutinosa).

Southern Oak Woodland

The oak trees in the southern oak woodland community provided the most important food source for the native people. Oak species such as the *Quercus lobata* and *Q. agrifolia* are found in this community. The acorns from these trees, processed into a storable food, provided a main food staple for the early inhabitants of Calabasas. The Indians ground the nuts first and then washed the meal several times in sandy depressions along the creeks. They made bread and hot cereal from the processed acorns.

Calabasas' Earliest Inhabitants Background

Knowledge about the earliest inhabitants of Calabasas provides significant information of the long history of the area, and contributes to understanding how these early people lived, and how use of the area has changed through time.

According to ethnographic records and Spanish accounts, the study area lies at the border between two different language and cultural groups; each group (the Chumash to the west and the Gabrielinos to the east) exploited the inland plant and animal resources and maintained villages along major trade routes.

One Native American village *Talepop*, is identified with Las Virgenes in the San Fernando Mission registers and is thought to be the archaeological site CA-LAN-229 located within the study area. The Native American village of *El Escorpion* in Bell Canyon (King 1992) lies a few miles north of the study area. Native Americans were still living in these villages during the Spanish and Mexican rule.

No specific prehistoric chronology for the immediate area exists; however, archaeological studies conducted within the areas indicate that the earliest villages date to 3,500 years ago. The initial occupations comprised a series of site complexes, one of which is located in Las Virgenes Canyon and includes CA-LAN-225, -227 and -229, on the Century Ranch within the study area. Studies of these sites indicate that they contain components representing the entire time period of prehistoric use of the study area.

The earliest inhabitants used large projectile points, scrapers, and grinding tools. By A.D. 500, the early people hunted with bows and arrows and relied on acorns for their staple food. Stone mortars and pestles became the common tool. Pestles made from oblong cobbles were held vertically to break and grind nuts in the bowl-shaped mortar. The prehistoric or Native American occupation of the Calabasas area ended abruptly when Spanish colonists began establishing their missions. Mission San Fernando Rey de Espana was established in the San Fernando Valley in 1797. The mission recruited Native Americans for surrounding areas including the Calabasas area. Disease and forced labor quickly reduced the native population and destroyed most traditional life ways.

Descendants of Native American people live and work in the Calabasas area. The Chumash and Gabrielino Indian people actively promote their traditional beliefs and crafts. They add to the unique cultural heritage for the City of Calabasas and its General Plan study area.

PALEONTOLOGIC RESOURCES

Geologic Setting

The City of Calabasas and its General Plan study area are situated within the Transverse Ranges Geomorphic Province. This province covers the Transverse Mountain Ranges and structural basins that trend approximately east-west. This trend is at variance with the majority of Southern California mountain range, which trend north-south. The tectonic forces that resulted in this mountain building are evident in the complicated geologic structure of the area.

Stratigraphy and Paleontology

The study area is underlain by sedimentary and volcanic units that range in age from the Miocene Epoch to the Recent. The following geologic units are present in ascending order: the Topanga Formation, the Modelo Formation, Conejo Volcanics, Older Alluvium and Young Alluvium (see Figure V-1). These units and their fossil content are described below.

Topanga Formation

The Topanga Formation is a shallow water marine sandstone unit with subordinate amounts of siltstone, mudstone and conglomerate deposited during the Miocene Epoch (18 to 9 million years B.P.). The Topanga Formation has yielded large fossil faunas of vertebrates and invertebrates, as well as floras. The vertebrate fauna is represented by a variety of extinct marine mammals, birds, fish, and reptiles. Specimens of fish, including sharks, birds, whales, walruses, sea lions, seals, and aquatic birds such as shearwaters and auks have been recovered from this unit. Fossil plants, sponges, sea urchins and sand dollars, barnacles, bivalves, marine snails, and trace fossils, the tracks, trails and burrows of organisms have also been collected from the Topanga Formation. Two Los Angeles County Museum of Natural History vertebrate localities are presently recorded within the Topanga Formation in the study area (confidential data). One of these localities contains numerous extinct land animals, which washed into the Miocene sea that existed in this region about ten million years ago and became fossilized. The remains of ancestral horses. camels, deer, rodents and carnivores have been recovered. The second locality has yielded the remains of fossil whales. Fossil plants and molluscan material have also been collected from Topanga Formation localities within the study area. Additional fossil material could include animals new to science, and would also expand the knowledge of previously existing taxa.

Modelo Formation

The Modelo Formation is a deeper water marine sedimentary unit consisting of siliceous shales, diatomites, siltstones, burnt shales, porcellanites, and sandstones deposited during the Miocene Epoch. This geologic unit is highly fossiliferous. The Modelo Formation has yielded the fossil remains of diverse vertebrates, invertebrates and plants. Fossil birds, plants, seaweed (kelp), bony fish, sharks, the burrows of soft-bodied animals (trace fossils), as well as foraminifera and calcareous nannoplankton (animal and plant members of the marine plankton) have been recovered from these strata. Large numbers of scientifically significant marine mammals have been noted in the Modelo Formation in the Calabasas area. Pithanodelphis nasalis, an unusual dolphin, walruses, whales, sea lions are representative of the marine mammals collected from this unit. The only sea cow recovered from the Santa Monica Mountains was collected near Laurel Canyon from the Modelo Formation. A giant toothed bird, Osteodontornis, was recovered from this formation in the Sherman Oaks area. The first recorded occurrence of a fossil cormorant, Phalacrocorax femoralis, was collected immediately northwest of the study area. Sula pohli, a booby, and Puffinus, a puffin, also have been recovered from the Modelo Formation in the Calabasas area. Three Los Angeles County Museum of Natural History localities are presently recorded within the study area. Fossil whales and marine birds were collected from these localities.

The Modelo Formation has a history of producing highly significant vertebrate, invertebrate and plant fossil materials. Previously collected vertebrate fossils have helped to outline major evolutionary changes in Miocene marine mammals, and have shed light in particular on the early development of sea-lions and seals. No vertebrate animal is completely known from the fossil record, and any additional materials could yield more information. The possibility also exists that new animals could be discovered during excavation. Continued collection of invertebrates and plants from this formation would increase the knowledge of paleoenvironmental conditions in the middle-late Miocene Epoch.

Conejo Volcanics

The volcanic units on the study area are the Conejo Volcanics and are primarily composed of basalts. These units, because they originate from molten magma, are not normally considered to have potential for containing fossil materials.

Older Alluvium

Deposits of older streams, rivers, and fans formed during the late Pleistocene (120,000 to 10,000 years ago) are present as buried remnants along the sides of canyons and washes, often concealed below Recent alluvial deposits. These older rocks contain pockets of "Ice Age" animals such as mammoths, horses and sloths. One vertebrate fossil locality that is utilized by the Los Angeles County Museum of Natural History, is located within the study area. This locality contains the remains of a Pleistocene sloth (*Paramylodon*). "Ice Age" animal remains yield important information about the climate and conditions in Southern California during the Pleistocene. In addition, the end of the Pleistocene was an extinction event of large proportions. Additional data may also play a role in understanding this event.

Younger Alluvium

Younger alluvium (10,000 years ago to the present) is present on canyon and gully bottoms. These sediments were deposited by recent streams. Sediments of this age are considered to be too young geologically to contain fossils *in situ*. However, fossils are known to erode from underlying older rock units and be transported down into the recent stream deposits. On occasion, specimens of "float" fossils are encountered and collected for scientific/educational purposes. However, the lack of contextual stratigraphic data makes these fossils less important scientifically.

Paleontologic Sensitivity

The paleontologic sensitivity of a geologic unit is a measure of the likelihood of fossil materials being present. Paleontologists working in the Southern California area have developed a classification scheme to define the paleontologic potential or sensitivity of rock units. The data used to define this classification system are based on 1) a review of existing paleontologic information both within the study site and the surrounding area, 2) discussion with paleontology professionals and 3) field experience in Southern California. The classification scheme is divided into five ratings or groupings. These ratings reflect the potential for fossil discovery during site development. The five ratings are presented below:

- No sensitivity This rating applies to rocks of a crystalline or highly metamorphosed origin where fossil remains are not expected to be preserved.
- Low sensitivity Rocks that are too young geologically to contain significant fossils in situ, are altered, or have a poor record of fossil discovery are classified as having a low paleontologic sensitivity.

- Moderate sensitivity A moderate sensitivity is for rocks where fossils would likely be exposed during earthmoving activities.
- High sensitivity A high sensitivity is for rocks where fossils would likely be exposed by earthmoving activities, are presently recorded, or have a well established history of producing fossils.
- Indeterminate Sensitivity Indeterminate sensitivity is reserved for units where poor rock exposures or a lack of study precludes a more specific sensitivity rating.

The Calabasas area contains rocks rated high, moderate, low and no paleontologic sensitivity (see Table II-25).

Table II-25
Paleontological Sensitivity
Calabasas General Plan Study Area
1990

Geologic Unit Paleontologic Sensitivity	
Modelo Formation	High
Topanga Formation	High
Younger Alluvium	Low
Conejo Volcanics	No
Older Alluvium	Moderate, locally high

Source: LSA Associates, 1993.

Figure V-1 in the Geology and Seismicity Section (V-A) illustrates the geologic formations.

Summary

The City of Calabasas and its General Plan study area are underlain primarily by geologic units of high paleontologic sensitivity. These fossil resources are a scientific and educational asset to the community. Although these resources will not be a hindrance to development, they need to be properly protected and addressed through the preparation of resource assessments and implementation of mitigation measures.

F. FISCAL MANAGEMENT

ECONOMIC DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

City's Demographic Support Base

This section briefly outlines the salient characteristics of the Calabasas consumer base, providing contrasts with the Los Angeles County region for selected indicators. The evidence is drawn from interpolations of the 1990 Census data for block groups. As such, it expands the commentary provided earlier discussions of the population and housing.

Commercial and service businesses in Calabasas are sustained by the residents of the City and its southern General Plan study area, along with portions of Hidden Hills. Some freeway oriented retail patronage comes from persons residing in western Los Angeles County and the western San Fernando Valley, although that is limited to a select few businesses, such as the auto dealerships. The total population of that consumer base in 1992 approximates 23,000, of which about 20,300 live within Calabasas and its General Plan study area.

Calabasas households are somewhat smaller, though considerably more affluent than Los Angeles County region as a whole. In large measure this reflects an older age structure and smaller proportion of minority group residents found in the City. Summary indicators for the City and its General Plan study area reveal the following:

- Average number of persons per household 2.57 for Calabasas versus 2.90 in Los Angeles County. The City/General Plan study area figure is virtually identical to that for Westlake Village, but smaller than the averages for Hidden Hills and Agoura Hills.
- One-third of the City/General Plan study area households are comprised of couples with no children at home. That compares to a one-in-four ratio for the county.
- One-in-five local households consists of a person living alone, slightly lower than the level in Los Angeles County at large (19.5 percent versus 25.0 percent).
- Non-Hispanic whites account for almost 90 percent of Calabasas City/General Plan study area residents, a share more than double that found countywide.
- Executive and professional occupations provide jobs for just under half of the community's workforce.

The age structure of Calabasas, its occupational mix, and local housing costs result in an income profile consistent with the county's affluent image for Western area hillside localities. At the time of the 1990 Census, the aggregate income of Calabasas and its General Plan study area approached \$790 million. Comparative income benchmarks show that although the household income for Calabasas is slightly lower than that of Agoura Hills and Westlake Village, the per capita income in Calabasas is higher.

Table II-26
Regional Income Comparisons
Calabasas General Plan Study Area
1990

Household Median				
Calabasas	\$66,421			
Agoura Hills	\$70,919			
Westlake Village	\$75,034			
Los Angeles Co.	\$34,965			
Per Capita Ave	rage			
Calabasas	\$38,181			
Agoura Hills	\$27,539			
Westlake Village	\$37 ,658			
Los Angeles Co.	\$16,149			

Source: Urban Research Associates, November 1992.

Higher income households typically spend a greater share of their resources on meals outside the home, transportation and travel, home furnishings, and clothing than do middle-income groups. This enhances the market potential for selected service businesses and stores which specialize in either discretionary or durable goods.

We estimate the potential for taxable retail and service categories to be on the order of \$130 to \$145 million annually. Of course not all of that can be captured by local Calabasas businesses because of patterns of existing competition and the City's smaller size, which places it below the locational requirements for certain types of firms, such as department stores.

Local Retail Sector Performance Analysis

Starting in July 1991, the State Board of Equalization began tracking the taxable sales of retail and service firms in Calabasas. When coupled with the patterns found in surrounding communities and after taking income and population data into account, one can determine just how well retailing in the City measures up to its potential.

Table II-27 displays the sales performance achieved by each of the five western Los Angeles County cities during the second half of 1991. Agoura Hills captured the largest share of activity, just under 35 percent. It was followed in order by Malibu and Westlake Village. Calabasas ranked fourth, with slightly over 19 percent of the region's total taxable sales.

Table II-27
Retail Performance Comparisons
Calabasas General Plan Study Area
1990

City		Second Half 1991 Se (Thousands)					
Total Taxable Sales							
	Agoura Hills	\$82,667	34.9%				
	Calabasas	\$45,526	19.2%				
	Hidden Hills	\$285	0.1%				
	Malibu	\$59,906	25.3%				
	Westlake Village	\$48,393	20.5%				
	Western Los Angeles County	\$236,777	100%				

	Second Half 1991 (Thousands)	Index to Subregion
Agoura Hills	\$3,986	1.280
Calabasas	\$2,219	0.712
Hidden Hills	\$157	.050
Malibu	\$3,423	1.099
Westlake Village	\$6,401	2.055
Western Los Angeles County	\$3,115	1.000

Source: Urban Research Associates calculations from California State Board of Equalization special tabulations and various population sources.

The high incomes of most area residents create per capita demand that is far above the average for communities the size of Calabasas, but a good portion of that is siphoned off by competition from adjacent jurisdictions. As a result, per capita local spending in Calabasas lags well behind its neighbors, recording only \$ 2,219 per person in taxable sales on an average. That was 29 percent below the region-wide figure and 44 percent less than neighboring Agoura Hills. Given the roughly comparable household incomes found in the two cities and higher per capita income of Calabasas, one can only conclude that substantial retail dollars flow from Calabasas residents to businesses in Agoura Hills and other locations beyond the City's borders.

Overall, the City experiences between \$39 and \$54 million annually in net outflows of taxable sales potential. That translates into a loss of \$390,000 to \$540,000 in sales tax revenues, a sum which approaches the amount of yearly property tax receipts. A more precise measure of the actual size of the retail sales leakage and its flow from particular sectors is awkward to estimate due to the limitations of economic data available for Calabasas. Both the absence of longitudinal evidence and nature of state disclosure regulations hinder the analysis. For example, total sales volumes are published by the state for only half of the specified retail merchandise lines because of the small number of firms in selected categories.

In those retail sectors for which market potentials and outflows can be estimated, the dollar volume of "lost sales" in most cases exceeds the annualized totals in the City (see Table II-28).

Table II-28
Retail Sales
Calabasas General Plan Study Area
1990

Est. Actual Total Taxable Annual Sales Leakage Sector (millions) (millions						
Apparel	\$1.5	\$8.0				
Drug Stores	\$0.0	\$4.9				
Food Stores	\$3.8	\$5.1				
Restaurant & Bar	\$12.6	\$2.6				
Home Furnishings	\$5.2	\$1.8				
Service Stations	\$11.0	<1.6>				

Source: Urban Research Associates, November 1992.

Indicates a net gain, rather than a leakage.

Gasoline service stations represent the only type of retailing for which Calabasas obtains a "net surplus" beyond its local consumer potential. Long distance commuters and patronage from through travelers bolster that particular sector. All the remaining sectors, including the basic conveniences of groceries and drug store items, represent opportunities for additional stores in Calabasas.

It would be misleading, however, to suggest that most of those dollars could be retrieved locally if Calabasas possessed a wider array of shopping opportunities. Shopping patterns for higher-order, durable goods, become ingrained and difficult to modify. As an example, the magnetism of certain regional malls remains strong and can last for decades. The

Community Attitude Survey conducted by Urban Research Associates revealed that three-fourths of local residents conducted their grocery shopping within Calabasas. However, similar proportions (72-82 percent) purchased their clothing, appliances, and home furnishings in other jurisdictions, particularly the westernmost San Fernando Valley. When people were asked which of eleven major types of retail and service businesses were needed, just two categories, quality restaurants (57 percent) and a movie theater (37 percent), received a positive reaction from more than a third of all respondents. People apparently feel very little inconvenience from having to travel outside their home community to satisfy their consumption demands.

Its general affluence notwithstanding, Calabasas faces continued competition from retail centers in the San Fernando Valley for general merchandise and home furnishing dollars, to cite just two sectors. Despite the absence of many retail and service categories within the community, residents are evenly divided, when asked whether or not there is a "need for new retail stores and services in Calabasas." Fifty-one percent of the respondents "agreed" or "strongly agreed" that there was a need for additional retailing, while forty nine percent "disagreed" or "strongly-disagreed" that there was a need. An expanded retail and service base would be advantageous from a fiscal standpoint but it is an economic development idea as much opposed as supported by community residents.

The recapture of market potential can be further constrained by limited market size. Virtually all major retail chains and commercial builders have minimum population or income density requirements before they will invest in a particular area or community. As it now stands, Calabasas represents too small a market to compete effectively for major retailers.

Commercial and Industrial Sites

Basic convenience retail needs are supplied to Calabasas residents from two neighborhood level shopping centers and a handful of convenience clusters. The Parkway Calabasas Center, anchored by Ralphs supermarket, and the older Alpha Beta Center on Mulholland offer consumer staples to local residents. Within the coming months, those will be supplemented by at least one larger center, Calabasas Promenade (190,000 square feet) and potentially another center, the 67 acre Kilroy-Ahmanson project.

From a land use perspective, the proportion of Calabasas zoned for retail, service, and industrial uses is neither exceptionally high nor exceptionally low. A total of 394 acres of the City fall under one of the commercially-related zoning designations. That equates to 4.8 percent of the total city acreage. An additional 32 acres have been designated for manufacturing within Calabasas, bringing the total proportion of commercial and industrial zoning to 424 acres or 5.1 percent of the total area. Comparably-sized cities typically have between three and seven percent of their total area in commercial uses; the range for industrial uses varies more widely, with some cases as little as one or two percent and others as high as twelve percent. Outside the City, but within the General Plan study area, another 196 acres assigned to existing or future commercial or industrial uses are located.

More than half the area zoned for commercial and industrial uses remained vacant or was only in the grading stages as of fall 1992. The CDP category dominates those sites available for future commercial activity (see Table II-29).

Table II-29
Commercial and Industrial Land Acreage
Calabasas General Plan Study Area
1990

Zoning	Calabasas	Unincorporated	Study Area
C-1	0	0	0
C-2	48	41	89
C-3	52	14	66
CM	0	0	0
CPD	94	27	121
M	0	16	16
MPD	29	1	30
RR	13	0	13
Total	236	99	335

Source: Urban Research Associates, March 1993.

Table II-30
Vacant Commercial Acreage
Calabasas General Plan Study Area
1990

Vacant Parcel Size	No. Parcels To	tal Acreage	Percent
Less than 2 acres	24	16.0	5.1
2 to 5 acres	20	59.2	18.7
5 to 10 acres	7	46.0	14.6
10 to 20 acres	5	74.1	23.4
20 or more acres	3	120.8	38.2
Total	58	316.1	100

Source: Urban Research Associates, November 1992.

Of the three parcels in the largest size category, one with an acreage of 49 acres is being developed during the fall of 1992 as part of the Kilroy-Ahmanson project. Despite this, parcel size should not act as a constraint on future commercial development.

Approximately 75 percent of the vacant commercial and industrially-zoned lands lie within the present city limits, primarily along Calabasas, Agoura, or Las Virgenes Roads. Specific properties tend to be large in scale, permitting eventual subdivisions appropriate to future projects.

FISCAL CONSIDERATIONS AND FISCAL MANAGEMENT

Revenue and Expenditure Patterns

The mix of Calabasas city government revenues and expenditure patterns for its initial fiscal year reveals local priorities as well as dependencies on particular sources. The City received approximately \$1.8 million more than it spent during fiscal 1991-1992, enabling a cash reserve available to meet contingencies and provide a capital improvements set-aside. During 1991-1992 fiscal year municipal spending amounted to \$264 per capita, a figure similar to that in neighboring Agoura Hills.

According to the City's financial summary, community development activities and police services cost approximately \$2,032,000 and \$1,907,000, respectively, for the 1992 fiscal year. The amount listed in Table II-31 for fire protection represents a small fraction of total fire service costs. The Consolidated Fire Protection District of Los Angeles County, funded directly by a share of the property tax and a benefit assessment of \$13.99 per single-family dwelling, supplies fire suppression and inspection services to Calabasas. Full costs of police and fire protection received from the respective county departments should be carefully monitored for their effectiveness.

City government in Calabasas directly spends far less than comparable cities for its public works and leisure services. The former arena is addressed by special benefit assessment districts, while the latter is covered by private services and county/state parklands. User fees to date have not been part of the community's public service financial strategy.

Table II-32 indicates the City's revenue sources for fiscal year 1991-1992.

Through its incorporation, Calabasas also absorbed two capital improvement areas, the Parkway Calabasas and Lost Hills Bridge and Thoroughfare Proposed Districts. Each is intended to upgrade interchanges with the Ventura Freeway. The Lost Hills District also supports widening of the bridge at Agoura Road at Las Virgenes Creek. These districts have not yet been formed.

Two concerns which revolve specifically around assessment districts have a particular bearing on financial management in Calabasas. These are the "neighborhood equity" issues and the management cost issue.

In the first instance, some neighborhoods may be paying into their own assessment district and into the City's general fund in support of services such as street lighting or park maintenance, while other areas pay only under the general fund levy. This creates differential charges between tax rate areas which could be substantial. Evidence from the County Auditor-Controller's office on this matter, although requested, has not been furnished as of this writing.

At some not-too-distant point the City of Calabasas may find itself faced with the administration of the various special districts within its borders and be required to pay their management costs. Currently handled by special Los Angeles County offices, these could become the responsibility of the City; in such an event the burden would likely fall upon the engineering staff. In light of the County's fiscal strain, this possibility may become a probability, one which brings new monitoring and implementation costs to city government. Watchful communication with Los Angeles County therefore becomes even more vital than it may have been in the past.

Table II-31
Municipal Expenditure Patterns
City of Calabasas and Reference Group

		City of Calabasas Fiscal Ye	ear 1991-1992	California Small Cities
		Amount	Share	Share
	EXPENDITURES			
1	General Administration	\$ 381,469	7.0%	9.8%
2	Police Services	\$ 1,906,925	35.0%	19.1%
3	Fire Protection	\$ 22,475 (a)	NA	7.9%
4	Animal Control	\$ 53,325	1.0%	0.3%
5	Public Works	\$ 297,791	5.5%	14.8%
6	Community Development	\$ 2,032,247	37.3%	9.0%
7	Water, Sewer and Solid Waste	NA	NA	10.6%
8	Parks, Recreation and Leisure Services	\$ 26,047	0.5%	14.0%
9	Public Utilities	NA	NA	11.0%
10	Non-Departmental and Miscellaneous Expenditures	\$ 723,958	13.3%	0.5%
	Total Expenditures	\$ 5,444,237	100.0%	100.0%

Sources:

City of Calabasas "Revenue and Expenditure Summary for Fiscal Year 1992" (October 22, 1992) and California State Controller, Annual Report of Financial Transactions of California Cities and Counties, Table 4. Calculations by Urban Research Associates.

Notes: Reference cities are all those with 1992 populations of 25,001 - 50,000 residents.

(a) Fire Protection for Calabasas is provided via Los Angeles County Consolidated Fire Protection District which directly receives a share of the one percent property tax levy.

CITY OF CALABASAS GENERAL PLAN:

COMMUNITY PROFILE

Table II-32
Municipal Revenue Patterns
City of Calabasas and Reference Group

		City of Calabasas Fiscal Ye	ear 1991-1992	California Small Cities
		Amount	Share	Share
1	Property Taxes	\$ 551,198	7.6%	11.1%
2	Sales and Use Taxes	\$ 967,664	13.3%	15.1%
3	Utility User Tax	\$ 1,258,571	17.3%	0.6%
4	Transient Occupancy Tax	\$ 420,766	5.8%	2.5%
5	Other Taxes	\$ 201,718	3.3%	8.7%
6	Development Fees and Permits	\$ 1,157,067	15.9%	3.9%
7	Fines and Forfeitures	\$ 37,518	0.5%	1.4%
8	Motor Vehicle In-Lieu	\$ 956,741	13.1%	5.1%
9	State Gasoline Tax	\$ 582,066	8.0%	2.3%
10	Highway Users Tax	\$ 478,994	6.5%	NA
11	Other State and Federal Grants	\$ 226,376	3.1%	4.8%
12	Interest, Rents and Related	0.	0.0	6.7%
13	Water and Sewer Enterprises	0.	0.0	11.8%
14	Solid Waste Disposal	NA	NA	3.2%
15	Other Current Service Charges	NA	NA	11.2%
16 -	Miscellaneous Revenues	\$ 99,567	1.4%	9.0%
17	Prop. A Transportation Funds	\$ 168,952	2.3%	NA

CITY OF CALABASAS GENERAL PLAN:

COMMUNITY PROFILE

Table II-32
Municipal Revenue Patterns
City of Calabasas and Reference Group

	egers en et de les et	City of Calabasas Fiscal Yea	r 1991-1992 Califo	mia Small Cities
		Amount	Share	Share
18	Proposition C Funds	\$ 136,923	1.9%	NA
19	Special Benefit Assessments	NA	NA	1.0
	Total Receipts	\$ 7,285,440	100.0%	100.0%

Source: City of Calabasas "Revenue and Expenditure Summary for Fiscal Year 1992" (October 22, 1992) and California State Controller, Annual Report of Financial Transactions of California Cities and Counties, Table 4. Calculations by Urban Research Associates.

MUNICIPAL FACILITIES AND SERVICES



III. MUNICIPAL FACILITIES AND SERVICES

Municipal Facilities and Services section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for a Circulation element. It also presents the background information necessary to comply with the provisions of Proposition 111 and the Los Angeles County Congestion Management Plan, including a description of the City's Transportation Demand Management (TDM) Ordinance. In addition, this chapter includes the information on public services within the City and addresses the relationship between public services and land use character.

The Municipal Services and Facilities chapter includes the following major sections.

- Circulation and Transportation
- Infrastructure
- Education Facilities
- Parks and Recreation
- Public Safety Services

A. CIRCULATION AND TRANSPORTATION

The Circulation and Transportation section examines not only streets and highways, but also parking, bicycle and pedestrian circulation, transportation alternatives to the single occupancy automobile, and commodity movement.

STREETS AND HIGHWAYS

The examination of streets and roads includes a review of the local roadway system, an identification of the regional highway system, and an evaluation of existing traffic conditions. Figure III-1 illustrates the existing circulation system within the City of Calabasas, as well as its general plan study area.

The Local Roadway System

The following are currently identified as arterial streets¹ within the City of Calabasas. For each street, roadway width and the level of intersection control (signal or stop sign) are identified. In addition, the current designation on the Los Angeles County Highway Plan is indicated. However, the City is not obligated to accept these designations in its general policy documents.

Lost Hills Road

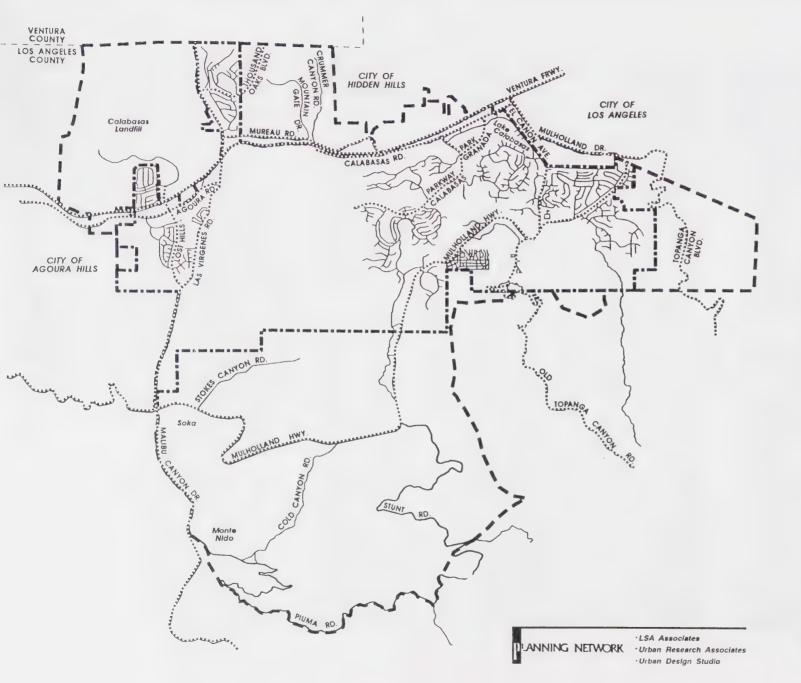
Lost Hills Road extends from the Calabasas Landfill, through the western portion of Calabasas to Las Virgenes Road and is classified as a secondary highway north of Driver Avenue and as a major highway south of Driver Avenue on the Los Angeles County Highway Plan.

The width of the street varies, and there are stop signs or signals at most intersections. Between the landfill and Agoura Road, Lost Hills Road is constructed as a two lane roadway, with the exception of a four lane section between Driver Avenue and Canwood Street (immediately north of Ventura Freeway). Lost Hills Road is built as a four lane divided roadway between Agoura Road and Las Virgenes Road. Lost Hills Road has signalized intersections at Agoura Road and Las Virgenes Road. There is also all-way stop sign control at intersections with the Ventura Freeway westbound ramps, Cold Springs Street, and Calabasas Hills Road/Meadow Creek Lane.

Agoura Road

Within the City of Calabasas, Agoura Road is classified as a major highway on the Los Angeles County Highway Plan and is constructed as a four lane roadway extending from the westerly city limit to Las Virgenes Road (the road actually extends west into the City of Agoura Hills, but is currently closed immediately west of the Lost Hills Sheriff's Station. Agoura Road has signalized intersections at Lost Hills Road and Las Virgenes Road.

Arterial streets in Calabasas have been identified as roadways designated as parkways, or major or secondary highways in the Los Angeles County Highway Master Plan.





CITY OF CALABASAS GENERAL PLAN

FIGURE III-1

EXISTING CIRCULATION SYSTEM

LEGEND

CITY LIMITS

SPHERE OF INFLUENCE

STUDY AREA ROADWAYS





Thousand Oaks Boulevard

Thousand Oaks Boulevard is designated as a major highway on the Los Angeles County Highway Plan and extends from Las Virgenes Road to the entrance of the Mountain Gate development. Between Las Virgenes Road and Parkmor Road, Thousand Oaks Boulevard is a two lane roadway. It widens to four lanes (with a raised median) east of Parkmor Road. Along Thousand Oaks Boulevard, there is stop sign control at Las Virgenes Road (all-way stop control) and at Parkmor Road. Thousand Oaks Boulevard is proposed as access point for the Ahmanson Ranch project in Ventura County.

Mureau Road

Mureau Road is classified as a major highway on the Los Angeles County Highway Plan, and extends from Las Virgenes Road east approximately two miles, where it crosses Ventura Freeway and terminates at Calabasas Road. Between Las Virgenes Road and Mountain Gate Drive, Mureau Road is a four lane divided roadway. East of Mountain Gate Drive, Mureau Road is a two lane roadway. Along Mureau Road, there is stop sign control at Las Virgenes Road and Calabasas Road (all-way stop control).

Calabasas Road

Calabasas Road extends from approximately three-quarters of a mile west of Mureau Road to Mulholland Drive. Calabasas Road is classified as a major highway on the Los Angeles County Highway Plan, but is currently constructed as a two lane roadway with a two-way, center, left turn lane along most of the roadway. The section of Calabasas Road between Parkway Calabasas and Park Granada Boulevard is four lanes wide with a raised median.

Parkway Calabasas

Parkway Calabasas extends from approximately three-quarters of a mile north of the Ventura Freeway interchange south through the Calabasas Park area. Parkway Calabasas is designated as a parkway and is constructed as a four lane divided roadway from Ventura Freeway to Ariella Drive. Parkway Calabasas has a signalized intersection at Calabasas Road, and all-way stop sign control intersections at Park Granada Boulevard and Park Entrada.

Park Granada Boulevard

Park Granada Boulevard is designated as a major highway on the Los Angeles County Highway Plan and is constructed as a four lane divided roadway from Parkway Calabasas to Calabasas Road. Park Granada has a signalized intersection at Calabasas Road and an all-way stop sign controlled intersection at Parkway Calabasas.

Old Topanga Canyon Road

Old Topanga Canyon Road is designated as a limited secondary highway on the Los Angeles County Highway Plan. The facility is broken into two separate sections. The eastern segment of Old Topanga Canyon Road extends from Mulholland Drive to Mulholland Highway. In this segment, old Topanga Canyon Road is a two lane roadway, with a short section immediately south of Park Ora which has one northbound lane and two southbound lanes. This section of Old Topanga Canyon Road has a signalized intersection at Mulholland Drive and all-way stop sign controlled intersections at Park Ora and Mulholland Highway.

The western segment of Old Topanga Canyon Road intersects with Mulholland Highway approximately one-quarter of a mile south west of the eastern section of Old Topanga Canyon Road. This section of Old Topanga Canyon Road is a narrow two lane roadway, with stop sign control at Mulholland Highway.

Mulholland Highway

Mulholland Highway is classified as a parkway on the Los Angeles County Highway Plan, and extends west from Mulholland Drive and ultimately ends at Pacific Coast Highway west of Malibu. Between Mulholland Drive and Daguerre Avenue, Mulholland Highway has two westbound lanes and one eastbound lane (although the eastbound lane is wide enough for two lanes). Between Daguerre Avenue and Declaration Avenue, Mulholland Highway has four lanes with a raised median. Mulholland Highway then narrows to two eastbound lanes and one westbound lane at Declaration Avenue. At Old Topanga Canyon Road (easterly segment), Mulholland Highway narrows to two lanes. Mulholland Highway has signalized intersections at Mulholland Drive, Paul Revere Drive, and Las Virgenes Road. It also has an all-way stop sign controlled intersection at the eastern segment of Old Topanga Canyon Road.

The Regional Highway System

The following roadways are regional or sub-regional in nature, and are under the jurisdiction of agencies other than the City of Calabasas. For each street, the roadway width and the level of intersection control (signal or stop sign) are identified. In addition, the controlling jurisdiction, state or county, is indicated.

Ventura Freeway (State Route Highway 101)

The Ventura Freeway is the major east-west transportation facility within the City of Calabasas. The Ventura Freeway is an eight lane freeway extending from the City of Los Angeles to the east, to Ventura and Santa Barbara Counties to the west. Within the City, access to the Ventura Freeway is provided via full interchanges at Lost Hills Road, Las Virgenes Road, and Parkway Calabasas. Access to the Freeway is also provided via full interchanges at Liberty Canyon Road (unincorporated Los Angeles County and the City of Agoura Hills) and Mulholland Drive (City of Los Angeles).

Topanga Canyon Boulevard (SR-27)

Topanga Canyon Boulevard is a state highway extending from the Simi Valley Freeway-San Fernando Valley Freeway (SR-118) in Los Angeles, adjacent to the eastern portion of Calabasas, to Pacific Coast Highway (SR-1) immediately east of Malibu. Topanga Canyon Boulevard is classified as a secondary highway, and is constructed as a two lane roadway south of Mulholland Drive.

Las Virgenes Road (County Highway N1)

Las Virgenes Road extends from the Los Angeles County-Ventura County line through the western part of Calabasas, and eventually into Malibu. South of the Ventura Freeway, Las Virgenes Road is a Los Angeles County Highway and is classified as a major highway on the Los Angeles County Highway Plan. At the southern city limit, Las Virgenes Road becomes Malibu Canyon Road and continues south to Pacific Coast Highway (SR-1) in Malibu.

Between the Ventura County line and Thousand Oaks Boulevard, Las Virgenes Road is constructed as a two lane roadway. Las Virgenes Road widens to four lanes at Thousand Oaks Drive and continues as a four lane divided roadway to Agoura Road. South of Agoura Road, Las Virgenes Road narrows to a two lane roadway. Las Virgenes Road has signalized intersections at the Ventura Freeway westbound ramps, the Ventura Freeway eastbound ramps, Agoura Road, Meadow Creek Lane, Lost Hills Road, and Mulholland Highway. There is all-way stop sign control at the intersection with Thousand Oaks Boulevard.

Planned Traffic Improvements

Ventura Freeway (State Route Highway 101) at Parkway Calabasas

Improvements to the Highway 101/Parkway Calabasas interchange are scheduled for completion by 1997. Parkway Calabasas provides north and south bound on-ramps to Highway 101. A northbound off-ramp is provided via Ventura Boulevard and a southbound off-ramp directly serves Parkway Calabasas from Highway 101. Currently, the project is awaiting Caltrans approval, however approval is eminent. Necessary improvements include interchange upgrades and ramp improvements to accommodate traffic entering and exiting Highway 101. The Phase I Advertising State is scheduled to begin in April 1993. The lead agency for this improvement is the County of Los Angeles and the improvements are to be funded by a Developer Fee District. There are no plans in this improvement to widen the Ventura Freeway. A second improvement phase is also being planned for this interchange. In this phase, the overpass/bridge structure is proposed for widening to five lanes.

Las Virgenes Road (County Highway N-1)

North of the Ventura Freeway, Las Virgenes Road serves as a major thoroughfare for the surrounding residential community within the City.

There are three proposed development sites along Las Virgenes Road, two of which are located within city limits. The approved Ahmanson Ranch Development (Ventura County) is to be located at the northern city boundary of Calabasas, the approved Pazar Development (City of Calabasas) is to be located south of Agoura Road on Las Virgenes Road, and the approved Enclave at Calabasas Development is to be located along Las Virgenes Road at Meadow Creek Lane.

The Ahmanson Ranch site is a mixed use development with a seventeen year buildout. Las Virgenes Road would provide access to and from the south end of the site to Highway 101. The County of Ventura has approved the project as well as taken the role as the lead agency. This project is currently being litigated with six to eight lawsuits being filed, including one by the City of Calabasas. Because of the uncertain legal status of this project, improvements proposed by the developer are likewise, uncertain. Exclusive of the pending litigation, possible improvements may include: an interchange upgrade at Highway 101 and Las Virgenes Road, and the widening of Las Virgenes Road between Thousand Oaks Boulevard and the project site from two to four lanes with enough right-of-way to accommodate a six lane road in the future. Funding for these improvements will be provided by the Ahmanson Ranch Development.

The Pazar Development has been approved by the City and is to be located on Las Virgenes Road, south of Agoura Road. Funding for circulation improvements will be by the Pazar Development, while the City of Calabasas will be the lead agency. Traffic improvements involved with the project include the widening of Las Virgenes Road within the project limits to four lanes with bike lanes and a landscaped median.

The Enclave at Calabasas Development is proposed to be located on Las Virgenes Road at Meadow Creek Lane. The City of Calabasas has approved the project and assumed the role of lead agency. Traffic improvement funding will be provided by the Micor Corporation. Proposed traffic improvements include the widening of Las Virgenes Road from two to four lanes within the project limits, the obtaining of right-of-way to accommodate six lanes and the accommodation of bike lanes.

Old Topanga Canyon Road

Old Topanga Canyon Road is located west of the eastern boundary in the City of Calabasas. Currently, Old Topanga Canyon Road is two lane roadway that intersects Mulholland Highway.

Improvements approved by the City of Calabasas are the widening on Old Topanga Canyon Road north of Mulholland Highway to accommodate left turn pocket lanes into a school and residential area. This project is headed and funded by the City of Calabasas. This widening project should be completed in the near future. In addition, the County of Los Angeles is currently improving storm drains along the roadway.

Existing Conditions

The discussion of existing traffic conditions examines average daily traffic (ADT) volumes for key roadways in the City of Calabasas, as well as AM and PM peak hour levels of service (LOS) at intersections requested by city staff.

Average Daily Traffic (ADT) Volumes

Existing daily traffic volumes for the primary roadways in the City of Calabasas and its General Plan study area were provided by the City Public Works Department, and were supplemented with additional counts. Table III-1 summarizes these existing daily traffic counts, along with the number of lanes along each roadway section.

In addition, the table presents the "capacity criteria" presently used by the City of Calabasas to determine the potential need for roadway improvements. The capacity criteria is determined based on type of roadway and number of travel lanes. When a roadway's volume exceeds the specified capacity criteria, a more thorough analysis is prepared to determine what improvements, if any are needed. Based on the capacity criteria, a ratio of the volume to capacity has been calculated. Volume to capacity ratios are used by many communities to define acceptable levels of service. Volume which exceed capacity criteria may indicate unacceptable levels of service.

Table III-1
Existing Daily Traffic Volumes

Roadway Section		Count	Lanes	Capacity Criteria	Volume	Ratio
	Lost Hills Road					
North of Highway 1	01	LSA ³	2	14,000	6,700	0.48
Highway 101 Over	crossing	LSA ³	2	14,000	9,800	0.70
Highway 101 - Ago	oura Road	LSA ³	4 Undiv.	22,000	16,300	0.74
Agoura Road - Mali	bu Hills Road	City ¹	4 Div.	25,000	11,900	0.48
Malibu Hills Rd - Me	eadow Creek Lane	City ¹	4 Div.	25,000	9,000	0.36
North of Las Virgen	es Road	City ¹	4 Div.	25,000	7,000	0.28
L	as Virgenes Road					
North of Thousand	Oaks Blvd	City ²	2	14,000	4,200	0.30
South of Thousand	Oaks Blvd	City ¹	4 Div.	25,000	7,400	0.30
North of Parkmor Re	oad	City ¹	4 Div.	25,000	9,300	0.37
Parkmor Road - Mui	reau Road	City ¹	4 Div.	25,000	13,400	0.54
Mureau Road - High	way 101	LSA ³	4 Div.	25,000	15,100	0.60
Highway 101 - Ago	ura Road	LSA ³	4 Div.	25,000	27,500	1.10
Agoura Road - Oak	Glen Street	City ¹	4 Div.	25,000	17,500	0.70
Glen Street - Meado	ow Creek Lane	LSA ³	4 Div.	25,000	16,300	0.65
Meadow Creek Lane	a - Lost Hills Road	City ²	2	14,000	23,400	1.67
Lost Hills Road - Mu	Ilholland Highway	City ¹	2	14,000	18,900	1.35
South of Mulholland	Highway	LSA ³	2	14,000	20,700	1.48
South of Piuma Roa	d	LSA ³	2	14,000	20,300	1.45
	Agoura Road					
West of Lost Hills R	oad	LSA ³	2	14,000	1,600	0.11
Lost Hills Road - Las	Virgenes Road	City ²	4 Undiv.	22,000	8,800	0.40
	Mureau Road					
East of Las Virgenes	Road	City ¹	4 Div.	25,000	3,700	0.15
Mountain Gate Dr -	Crummer Canyon Rd	LSA ³	4 Div.	25,000	3,400	0.14
North of Calabasas i	Road	City ¹	2	14,000	6,200	0.44

Table III-1
Existing Daily Traffic Volumes

Roadway Section	Count Source	Lanes	Capacity Criteria	Volume	Ratio
Calabasas Road					
Mureau Road - Parkway Calabasas	City ²	2	14,000	6,600	0.47
Parkway Calabasas - Park Granada Blvd	City ²	4 Div.	25,000	12,500	0.50
Park Granada Blvd - Mulholland Drive	City ²	2	14,000	16,500	1.18
Parkway Calabasas					
South of Calabasas Road	LSA ³	4 Div.	25,000	11,700	0.47
North of Park Granada Boulevard	City ¹	4 Div.	25,000	7,300	0.29
Park Granada Blvd - Park Entrada	City ¹	4 Div.	25,000	8,900	0.36
Park Entrada - Paseo Primaro	City¹	4 Div.	25,000	6,200	0.25
Paseo Primaro - Camino Portal	City ¹	4 Div.	25,000	3,700	0.15
Camino Portal - Palmilla Drive	City ¹	2	14,000	1,500	0.14
Park Granada Boulevard					
East of Parkway Calabasas	City ¹	4 Div.	25,000	3,900	0.16
South of Calabasas Road	LSA ³	4 Div.	25,000	9,300	0.38
Old Topanga Road					
South of Mulholland Drive	LSA ³	2	14,000	10,300	0.74
Vicasa Road - Bluebird Drive	City ¹	2	14,000	8,800	0.63
North of Mulholland Highway	City ²	2	14,000	7,000	0.50
South of Mulholland Highway	LSA ³	2	14,000	2,500	0.18
Topanga Canyon Road					
South of Mulholland Drive	Caltrans ¹	2	14,000	14,000	1.00
Mulholland Highway			,	1 1,000	1,00
East of Las Virgenes Road	LSA ³	2	14,000	1,900	0.14
North of Stunt Road	LSA ³	2	14,000	2,700	0.19
east of Canyon Drive	LSA ³	2	14,000	4,800	0.34
Vest of Old Topanga Road (southerly)	LSA ³	2	14,000	6,600	0.47
ast of Old Topanga Road (southerly)	City ²	2	14,000	6,900	0.49

CITY OF CALABASAS GENERAL PLAN:

COMMUNITY PROFILE

Table III-1
Existing Daily Traffic Volumes

			Capacity		
Roadway Section	Count Source	Lanes	Criteria	Volume	Ratio
Topanga Canyon Road (Cont'd)					
East of Old Topanga Road (northerly)	City ¹	2	14,000	7,100	0.51
Old Topanga Road - Declaration Ave.	LSA ³	2	14,000	7,900	0.56
West of Mulholland Drive	City ¹	4 Undiv.	22,000	13,400	0.61

Source: LSA Associates, Inc., 1993.

¹ 1991 counts.

² 1990 counts.

^{3 1992} counts.

Peak Hour Intersection Levels of Service

City staff specifically requested that peak hour intersection levels of service be examined for key intersections in the vicinity of each of the three freeway interchanges within the City. Existing AM and PM peak hour turn volumes for these intersection were taken from counts.

Peak hour intersection operations are assessed relative to overall intersection capacity. The intersection level of service is determined based on the portion of the intersection's capacity used by peak hour traffic. Depending on the type of stop control (i.e., signalized or stop sign controlled), various level of service analysis methodologies are used.

For signalized intersections, the turn volumes for each intersection are examined to determine the volume to capacity (v/c) ratio for each turn movement. Using the Intersection Capacity Utilization (ICU) analysis methodology, conflicting turn movement volumes and their v/c ratios are examined to determine the overall capacity utilization of the intersection. The percentage resulting from this analysis is called the Intersection Capacity Utilization, or ICU. In essence, an ICU is the percentage of an intersection's capacity which is needed to adequately accommodate all vehicles traveling through the intersection.

In addition to v/c ratios, the ICU methodology provides a general indication of the operations of an intersection, termed the level of service (LOS), based on the peak hour v/c ratio. The LOS of an intersection is designated by the letters "A" through "F", with LOS A representing optimal intersection operation and LOS F representing an overcapacity situation. Peak hour LOS B through E represent various intermediate levels of operation between LOS A and LOS F. Table III-2 provides a description of level of service categories for signalized intersections.

For unsignalized stop sign controlled intersections, the Highway Capacity Manual unsignalized intersection analysis methodology is used to determine peak hour operations and levels of service. For two-way stop controlled intersections, the Highway Capacity Manual analysis methodology provides a level of service based on the amount of reserve (i.e., residual) capacity available for each turn movement to and from the minor street approach per hour (the methodology assumes through traffic along the major street will travel unimpeded, thereby resulting in acceptable levels of service for these through traffic movements). Therefore, the LOS is calculated for two movements: 1) the LOS for the worst turn movement from the major street to the minor street (termed the major street approach LOS), and 2) the LOS for the worst turn movement from the minor street to the major street (termed the minor street approach LOS). Reserve capacity for each of these movements range from greater than 400 vehicles per hour for LOS A, to less than zero for LOS F. LOS D corresponds to a residual capacity for 100 or more vehicles. Table III-3 provides a description of level of service categories for unsignalized intersections

Table III-2
Vehicular Levels of Service at Signalized Intersections

Level of Service	Description	V/C Ratio
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal cycle. The traffic operation can generally be described as excellent.	0.00-0.60
В	Level of Service B describes a conditions where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.	0.61-0.70
С	Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but often not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71-0.80
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lover demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.	0.81-0.90
Ε	Capacity occurs at Level of Service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting upstream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operations can generally be described as poor.	0.91-1.00
F	Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.	1.01+

Source: Transportation Research Circular No. 212, Transportation Research Board, 1980.

Table III-3

Vehicular Levels of Service at Unsignalized Intersections

evel o Service	**************************************	Reserve Capacity
Α	Little or no delay to minor street traffic.	> = 400
В	Short traffic delays to minor street traffic.	300-399
С	Average traffic delays to minor street traffic.	200-299
D	Long traffic delays to minor street traffic.	100-199
E	Very long traffic delays to minor street traffic.	0-99
F	Demand volume exceeds capacity of the lane. Extreme delays will be encountered with queuing which may cause severe congestion affecting other movements in the intersection. This condition usually warrants improvement to the intersection.	< 0

Source: Highway Capacity Manual Special Report 209, Transportation Research Board, 1985.

For all-way (three or four-way) stop controlled intersections, the analysis methodology contained in Transportation Research Board Circular 373 was used. This analysis methodology examines traffic volumes entering the intersection and determines an average delay per vehicle for each intersection approach. An overall delay for the intersection is calculated based on the delay for each approach. The intersection level of service is based on the overall delay.

Table III-4 summarizes the AM and PM peak hour levels of service for each of the intersections analyzed.

Table III-4
Existing Intersection Levels of Service

			ever fraukticker	10.000	Although the second	
Intersection		Control	ICU (1)	LOS Major/Minor (2)	ICU (1)	LOS Major/Minor (2)
1.	Lost Hills Road/Highway 101 Westbound Ramps	Stop Sign	•	A/E	-	F/F
2.	Lost Hills Road/Highway 101 Eastbound Ramps	Stop Sign	•	A/D		D/F
3.	Lost Hills Road/Agoura Road	Signalized	0.59	A	0.60	A
4.	Las Virgenes Road/Mureau Road	Stop Sign		A/D	•	A/F
Б.	Las Virgenes Road/Highway 101 Westbound Ramps	Signalized	0.77	С	0.59	A
6.	Las Virgenes Road/Highway 101 Eastbound Ramps	Signalized	0.86	D	0.78	C
7.	Las Virgenes Road/Agoura Road	Signalized	0.87	D	0.69	В
8.	Highway 101 Westbound Off-Ramp/Ventura Blvd	All-Way Stop	-	E (3)	-	F (3)
9.	Parkway Calabasas/Hwy 101 Westbound On-Ramp	No Control	-	C/- (4)		F/- (4)
10.	Parkway Calabasas/Highway 101 Eastbound Ramps	Stop Sign		C/F		F/F
11.	Parkway Calabasas/Calabasas Road	Signalized	0.85	D	0.86	D

Source: LSA Associates, Inc., 1993.

Intersection Capacity Utilization (ICU) is only presented for signalized intersections.

Where applicable, major/minor LOS represents levels of service for critical left turns from the major and minor streets, respectively, for unsignalized intersections.

All-way stop control LOS is calculated for the entire intersection, based on overall delay.

The intersection of Calabasas Parkway/Highway 101 westbound on-ramp does not have any minor street movements. The LOS for the major street is for the northbound left turn from Parkway Calabasas onto the freeway ramp.

Major Traffic Issues and Concerns

Based on review of existing traffic conditions in the City of Calabasas, conversations with City staff, and meetings with the City's Transportation Committee, a number of key traffic issues and concerns have been formulated. These issues are discussed below.

East-West Circulation

Examination of the existing circulation system within the City (previously referenced Figure III-1) shows that a majority of the primary roadways in the City of Calabasas are north-south roadways. The only roadways which connect the east and west parts of the City are Highway 101 and Mulholland Highway. Mulholland Highway is too far south to be used by a majority of the traffic traveling between the east and west portions of the City. Due to the lack of east-west facilities, people desiring to travel from one end of the City to the other are required to use Highway 101. The necessity for using a regional facility for local trips is not a desirable situation.

Freeway Interchanges

As discussed previously, access to the Ventura Freeway is provided via three interchanges in the City of Calabasas. The intersection level of service analysis indicates that all three interchanges operate at unacceptable levels of service during the AM and/or PM peak hours. Caltrans is currently analyzing both the Lost Hills Road/Ventura Freeway interchange and the Parkway Calabasas/Ventura Freeway interchange to determine the modifications needed to improve levels of service at these locations.

Local versus Regional Traffic

The City of Calabasas experiences a significant amount of regional through traffic (traffic without an origin or destination in the City) traveling through the City via the Ventura Freeway, Las Virgenes Road, and Mulholland Highway. Much of this traffic is to and from the coastal cities for beach access. The regional through traffic has a significant impact on freeway interchanges in the City, as well as on the levels of service on local roadways, thereby reducing the capacity needed to accommodate local traffic.

Traffic Accidents

In the City of Calabasas, automobile-involved accidents average approximately 140 per year¹. The following is a report of the causes and locations of automobile accidents in the City of Calabasas. The report is based on the City's Statewide Integrated Traffic Records Systems Record².

The accident causes in the City vary from improper turns to unsafe speeds. The leading cause of accidents in Calabasas in right-of-way encroachment/failure to yield (35 percent). Unsafe speed (25 percent) is the second leading caused followed by improper turns (15 percent), alcohol and drugs (10 percent), stop control (5 percent), and other (10 percent). Other causes are categorized as "too close", "daylight", "hazardous parking", "lane change", "backing", "wrong side", and "animal". For a majority of the accidents, weather and roadway conditions were not a factor. A majority of the accidents in 1992 occurred on clear days with dry/normal roadway conditions.

There were 97 accident locations in Calabasas for 1992. A majority of accidents were located along the Las Virgenes Road corridor with 60 accidents, the Calabasas Road corridor with 29 accidents, the Mulholland Highway corridor with 20 accidents, the Parkway Calabasas corridor with 14 accidents, the Agoura Road corridor with 13 accidents and the Los Hills corridor with 13 accidents.

The primary cause of accidents along the Las Virgenes Road corridor was a combination of right-of-way encroachment/failure to yield at intersections and unsafe speeds. In 1992, the intersections of Thousand Oaks Boulevard, Agoura Road, Lost Hills Road, Oak Glen Street, westbound Highway 101 on-ramp and eastbound Highway 101 off-ramp with Las Virgenes Road were responsible for 37 accidents. With development projects along las Virgenes Road currently in process, traffic on the roadway is expected to increase in the future. Intersection and speed control improvements on Las Virgenes Road will assist in minimizing future accidents on this roadway.

The Calabasas Road corridor was the site for 29 accidents in 1992. The intersection with the highest number of accidents on the corridor is Calabasas Road and Parkway Calabasas with 12 accidents. The leading cause of accidents at the location was right-of-way encroachment/failure to yield. Another location on Calabasas Road with a high number of accident is the intersection of Calabasas Road with Park Granada Boulevard. A total of seven accidents occurred at this intersection in 1992. The primary cause of accident was also right-of-way encroachment/failure to yield. Intersection improvements may be needed to reduce future accidents.

The average resulted from the 1991 and 1992 Statewide Integrated Traffic Records System Report; and the 1992 Los Angeles County Sheriff's Department Traffic Information System Report totals.

The Statewide Integrated Traffic Records Systems is a centralized accumulation of data for fatal and injury motor vehicle traffic accidents. The reports are generated by almost 100 California Highway Patrol areas and over 400 city police departments and sheriffs offices.

A majority of the accidents on Mulholland Highway and Lost Hills were caused by unsafe speed. Reduced speed limits may be needed to reduce accidents. Unlike the accidents on Mulholland Highway and Lost Hills, Parkway Calabasas and Agoura Road accidents were primarily caused by right-of-way encroachment/failure to yield. Improvements to the intersection geometrics along these roadways may be needed to reduce accidents.

Z Traffic

A specific regional traffic issue of particular concern to the City residents is "Z" traffic. This circulation phenomenon is characterized by traffic traveling between areas to the west along Highway 101 and coastal cities via City roadways, such as Las Virgenes Road (the term "Z traffic" comes from the pattern created by traffic traveling from the west on Highway 101 to Las Virgenes Road to Pacific Coast Highway). As discussed previously, the section of Las Virgenes Road between Highway 101 and Agoura Road currently has a daily volume of 27,500, which is greater than the Los Angeles County capacity criteria for a four lane roadway. Similarly, Las Virgenes Road south of Meadow Creek Lane (where it transitions from a four lane roadway to a two lane roadway) has daily volumes of between 18,900 vehicles and 23,400 vehicles which, is considerably in excess of the capacity criteria for a two lane roadway. The Z traffic contributes to and exacerbates these unacceptable conditions. Therefore, Z traffic is regional through traffic which has a significant impact on freeway interchanges in the City, as well as on the capacity and levels of service of Las Virgenes Road.

Private Roadways

Many of the residential neighborhoods in the City of Calabasas are gated communities and accessed via private roadways. These private roadways are not interconnected, resulting in the inability for residents to travel to adjacent areas of the City via local streets. Travel to and from these residential neighborhoods requires traffic to use major roadways for purposes of making local trips, thereby increasing potential congestion along these roadways.

Roadways and Intersections of Concern

The City of Calabasas Citizen Transportation Committee has done extensive research to identify intersections and roadways within the City which are of concern of local residents. These roadways and intersections are:

- Lost Hills Road/Highway 101 Overcrossing
- Lost Hills Road/Cold Springs Street
- Lost Hills Road/Las Virgenes Road
- Las Virgenes Road/Parkmor Road
- Las Virgenes Road between Highway 101 and A.E Wright School
- Parkway Calabasas/Highway 101 Interchange

- Parkway Calabasas/Calabasas Road
- Park Granada Boulevard/Calabasas Road
- Mulholland Highway/Old Topanga Canyon Road
- Mulholland Highway/Freedom Drive
- Mulholland Highway/Eddingham Avenue
- Mulholland Highway/Declaration Avenue
- Mulholland Highway adjacent to Calabasas High School
- Calabasas Road through Old Town
- Mulholland Drive/Valley Circle Boulevard
- Mulholland Drive/Valmar Road
- Mulholland Drive/Mulholland Highway
- Mulholland Drive/Topanga Canyon Boulevard.

PARKING

When the City of Calabasas incorporated in 1991, it adopted the Los Angeles County Zoning Ordinance, which includes parking standards. The City has found that the a revision to the County's parking standards may be needed to reflect the City's parking demand. Changes to the parking standards are not proposed at this time.

Observations and conversations with City staff indicate that local residents have established their own, unofficial park-and-ride lot immediately south of the Highway 101/Las Virgenes Road interchange. This is indicative of a demand for improved park-and-ride facilities at this location, as well as in other areas of the City.

PUBLIC TRANSIT

Public transit in the City of Calabasas includes Rapid Transit District (RTD) buses; Commuter Transportation Services Incorporated (Commuter Computer); and Calabasas Dial-A-Ride.

RTD provides two types of service in the City, which are indicated in Figure III-2. Regular bus service stopping at bus stops between Thousand Oaks and Canoga Park is provided via RTD Route 161. Route 161 stops regularly at the Las Virgenes Road and the Parkway Calabasas intersection with the Ventura Freeway from approximately 6:30 a.m. to 8:00 p.m. Route 161 also provides connections to other RTD routes. Another service offered by RTD in the City of Calabasas is the Commuter Express Route 423. This service offers directional, peak hour bus service from approximately 5:30 a.m. to 7:00 a.m. and from 5:00 p.m. to 8:00 p.m., with minimal stops from Calabasas to and from the Los Angeles/University of Southern California area. The stop in Calabasas is located on Calabasas Road and the Ventura Freeway. Stop in Los Angeles are located on Hope Street with Olympic, and First Street. The stop in the USC area is located on Jefferson Boulevard and Hoover Street. Other routes can also be accessed from Route 423.

Commuter Computer offers a variety of transportation services ranging from a match list service to surveys for commuter attitude and average vehicle ridership. All of the Commuter Computer services are offered to the residents of Calabasas. Commuter Computer is a private, non-profit, ridesharing organization funded cooperatively by Caltrans, the Southern California Association of Governments, San Bernardino Associated of Governments, Ventura County Association of Governments, Los Angeles County Transportation Commission, Orange County Transportation Authority, and the Riverside County Transportation Commission.

Residents of the City can call Commuter Computer to attain a match list that locates other employed individuals in close proximity to their home who are interested in carpooling or vanpooling. The match list is organized into sections, by employee name and company, employee work hours, phone number and office address. Information regarding best matches for each individual, existing vanpool and/or buspool services and park and ride facilities are also provided with the match list service.

The Calabasas' Dial-A-Ride Program is a service offered to city residents who are 55 years of age or older, and to residents who are disabled. The City of Calabasas has contracted with Checker Cab to provide transportation for eligible residents for travel to any point within the City, plus authorized points outside Calabasas. Designated locations are:

- shopping, dining and entertainment centers (Fallbrook Mall, Topanga Plaza, Promenade at Woodland Hills);
- hospitals and medical facilities (Kaiser Permanente, Humana West Hills, Westlake Medical Center);
- transportation (LAX bus stops); and

 community recreation centers (St. Mel's Catholic Church Adult Club, West Valley Jewish Community Center, Woodland Hills Community Church Primetimes Club).

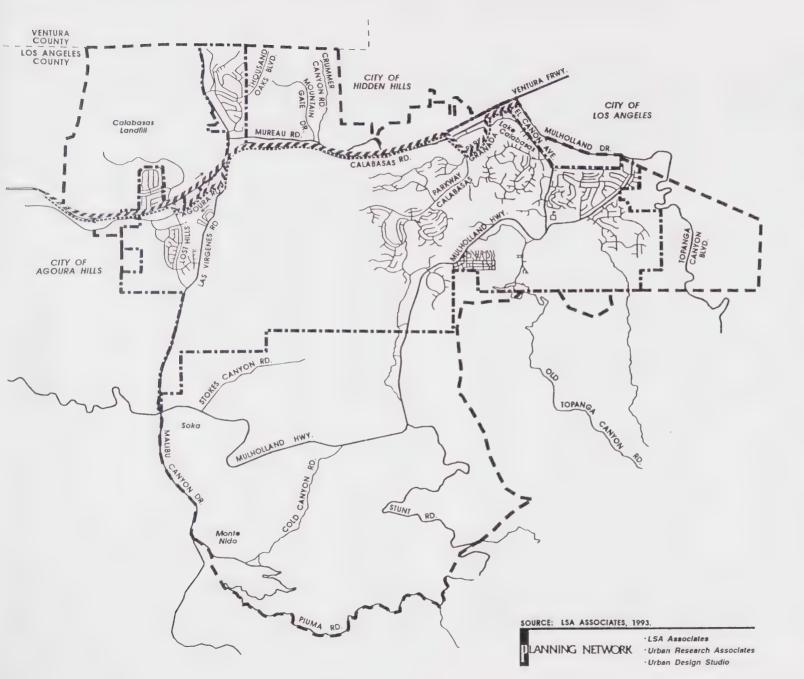
The cost of Calabasas' Dial-A-Ride service is 50 cents for a one-way trip. Service is offered 24 hours a day, seven days a week, including holidays, and estimated pick-up time is normally 5 to 15 minutes. During special seasons such as holidays, this service is extended to all of the residents in the City.

COMMODITY MOVEMENT

The City of Calabasas presently does not formally designate any of its roadways as truck routes. Trucks are restricted on some of the roadways, such as Parkmor Road.

Generally, trucks travel along the Ventura Freeway and service the commercial and business park uses along the Freeway. Issues regarding commodity movement within the City of Calabasas are primarily related to the "Z" traffic problem, discussed previously. City staff, in conjunction with residents, are currently reviewing various strategies to deter trucks destined for locations outside the City from Calabasas streets, which presently utilize city roadways (such as Las Virgenes Road) as a faster alternative to the coastal cities than Highway 101.

There are no other facilities that transport commodities, such as major pipelines or railroads, in the study area. Transmission lines, carrying electricity, are discussed in Section III-B, Infrastructure.





CITY OF CALABASAS GENERAL PLAN

FIGURE III-2
TRANSIT ROUTES

LEGEND

1.0

CITY LIMITS

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SPHERE OF INFLUENCE

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT (RTD) ROUTE 161



COMMUTER EXPRESS ROUTE 423





TRANSPORTATION DEMAND MANAGEMENT

Regulatory Framework

In an effort to reduce traffic congestion and attain federal and state air quality standards, a series of regulations designed to reduce vehicle trips (VT) and vehicle miles traveled (VMT) by increasing average vehicle ridership have been adopted by federal, state, regional and local agencies. Increases in average vehicle ridership will reduce the impacts of existing development, background growth and new projects on the transportation network, thereby improving mobility and air quality.

The Federal Clean Air Act, as amended by the Clean Air Act Amendments of 1990 require states to prepare State Implementation Plans that contain measures to attain the air quality standards established by the Clean Air Act. The California Clean Air Act also sets air quality standards and authorizes regional air pollution control districts to establish regulations to achieve compliance with federal and State standards. In Southern California, the California Air Resources Board, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP) for the South Coast Air Basin (the "basin"), which sets forth control measures by which the basin will achieve federal and State ambient air quality standards. Designated portions of the AQMP, upon approval by the U.S. Environmental Protection Agency (EPA), will constitute the State Implementation Plan for the basin. The 1991 AQMP was recently completed.

Federal Requirements

The Clean Air Act contains several Transportation Demand Management provisions intended to reduce mobile source emissions in areas that fail to meet federal air quality standards. For example, the Clean Air Act mandates that State Implementation Plans for severe and extreme ozone non-attainment areas (the basin having been designated "extreme") be revised to, "at a minimum, require that each employer of 100 or more persons in such an area increase average passenger occupancy per vehicle in commuting trips between home and the workplace during peak travel periods by not less than 25 percent." Although the Clean Air Act does not impose direct requirements on employers today, it requires that regulatory agencies develop and implement regulations design to achieve the average vehicle ridership standards by 1998. Assuming the 1991 AQMP is used as the baseline year and that the "area" average is the basin average of 1.13, increasing the existing area average by 25 percent would ultimately require large employers to achieve an average vehicle ridership of 1.4 by 1998.

In addition to the specific increases in average vehicle ridership mandated for larger employers, the Clean Air Act requires that severe and extreme ozone non-attainment areas to have revised their implementation plans by November, 1992, so as to identify and implement "specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles travelled or numbers of vehicle trips." Such measures may be selected from a list of measures to be developed by EPA, which list may include, among other things, "trip reduction ordinances" and "programs for the provision of all forms of high-occupancy, shared-ride services." The Clean Air Act does not impose direct requirements, but rather requires the basin to develop and implement regulations to comply.

The Intermodal Surface Transportation Efficiency Act of 1991 was the first effort by the federal government to link transportation, land use and air quality policy, and requires that local congestion management plans be developed throughout the country.

State Requirements

The California Clean Air Act requires the basin to adopt and implement regulations to reduce emissions from mobile sources by increasing average vehicle ridership. For example, the California Clean Air Act requires each air pollution control management district to include in its attainment plan "transportation control measures to achieve an average during weekday commute hours of 1.5 or more persons per passenger vehicle by 1999."

In addition to the California Clean Air Act, legislation designed to reduce traffic congestion was adopted in 1989 and 1990 by the California legislature. Assembly Bills 471 (July 10, 1989) and 1791 (February 11, 1990) also require that, in order to be eligible for gas tax revenues, each county containing an urbanized area adopt a Congestion Management Plan (see Regional Requirements, below).

Regional Requirements

SCAQMD and SCAG also have adopted regulations imposing average vehicle ridership requirements. In particular, the SCAQMD has adopted Regulation XV, which requires employers of 100 or more persons at a single work site to submit trip reduction plans aimed at increasing average vehicle ridership to 1.3, 1.5 or 1.75, depending on the location of the work site. Subject employers in Calabasas have an average vehicle ridership target of 1.5. Regulation XV trip reduction plans are required to contain a list of specific incentives the employer will provide to employees that can reasonably be expected to lead to achievement and maintenance of the employer's average vehicle ridership target within 12 months of plan approval. Although failure to meet the target is not a violation of Regulation XV, if all incentives set forth in the plan are offered, each year after plan approval each subject employer is required to submit to the SCAQMD a report on its average vehicle ridership, an analysis of the effectiveness of its trip reduction plan and a revised plan with additional incentives designed to meet the target if the employer failed to meet the target the prior year. Such average vehicle ridership requirements apply to employees who arrive at the work site between 6 a.m. and 10 a.m. Monday through Friday.

In addition, SCAG has adopted guidelines (the "SCAG Guidelines") designed to assure that "regionally significant projects" are consistent with the AQMP and other regional planning documents. For general development projects, the SCAG Guidelines require that, among other things, the project demonstrate that "vehicular trips have been reduced to the greatest extent feasible by the application of transportation demand management strategies."

SCAG is also in the process of revising its Regional Mobility Plan, a critical transportation policy document for the region. The new plan will place increasing emphasis on high occupancy vehicles and other transportation demand management measures (see also discussion on Air Quality).

The 1991 Air Quality Management Plan

Although the AQMP does not impose direct requirements on employers or projects, it contains the basin's commitments to adopt rules and regulations in the future. Regulations adopted may differ materially from the measures set forth in the AQMP (and some measures may not be implemented at all), so long as the overall level of emissions reductions set forth in the AQMP are achieved. The AQMP cites five such measures that are intended to reduce mobile source emissions by increasing average vehicle ridership or reducing VMT: Enhanced Regulation XV, Person Work Trip Reduction, Employer Rideshare and Transit Incentives, Parking Management, and Special Activity Center Trip Reduction.

The Enhanced Regulation XV measure commits the District to amend Regulation XV to increase average vehicle ridership targets and expand the category of employers to whom the regulation applies. In general, the measure would increase the existing "base" average vehicle ridership target of 1.5 to 1.8 by 1999, and reducing the employer threshold from those with 100 employees at a single site to those with 50 employees at a single site. The AQMP identifies several different combinations of employer thresholds and average vehicle ridership targets that will be analyzed through the SCAQMD rulemaking process. Such combinations include components that would lower the employer threshold to those with as few as 20 employees and raise average vehicle ridership target to as high as 2.0 for the largest facilities.

The Person Work Trip Reduction, Employer Rideshare and Transit Incentives and Parking Management measures are together designed to assist the basin to achieve an average vehicle ridership target of 1.5 by 2000 and 2.1 by 2010. Each of such measures anticipates implementation by the end of 1992, or backstop provisions will be implemented at the regional level.

The Person Work Trip Reduction measure is projected to decrease areawide person work trips by 12 percent by 1999, 20 percent by 2004 and 30 percent by 2010 through local government ordinances that would require or provide incentives for telecommuting, bicycle lanes, alternative work weeks and other means to reduce work trips. The measure is anticipated to apply to employers with 25 or more employees at a single work site, or to multiple employer work sites with 25 or more employees.

The Employer Rideshare and Transit Incentives measure focuses on "vehicle trip reduction and traffic mitigation measures for home to work trips." The measure would require local governments to adopt ordinances to require facilities with 100 or more employees to adopt trip reduction plans. The measure would promote vanpool purchase incentives, promote the use of owner-operator electric vans, and support passage of vanpool credit tax legislation for employees who carpool. Ultimately, the goal of the measure is to increase carpools of three or more persons by 30 percent over 1984 levels by 1995, while decreasing other work related vehicle trips by five percent due to the formation of vanpools by 1995.

Similarly, the Parking Management measure would be implemented by local governments, and applies to all employers with 100 or more employees (and possibly with as few as 25 or more employees) at a single work site. The measure proposes to increase daytime parking fees, establish a surcharge on parking for single occupant vehicles and/or a discount for multi-occupant vehicles, require employers to offer preferential parking for employee ride-sharers, and reduce the amount of "free" parking at non-work centers. The stated goal of the measure is "to shift significantly the demand from solo driving toward transit, carpooling, or non-motorized trips."

The Special Activity Center Trip Reduction measure would contribute to future increases in average vehicle ridership for non-work trips. The special activity centers measure is directed toward reducing non-work trips to special event centers (facilities with capacities of over 10,000 visitors), regional shopping centers and airports. This measure might require instituting peripheral park and ride lots with shuttle services, significant discounts for transit passes with event tickets, and parking lot fees based on vehicle occupancy.

Los Angeles County Congestion Management Plan

As required by Section 65089 of the California Government Code, the Los Angeles County Metropolitan Transportation Authority is in the process of preparing the County's first Congestion Management Plan. The Los Angeles County CMP was adopted in November, 1992. The Congestion Management Plan is the first state legislative effort to link transportation, land use, and air quality in the decision making process. The requirements for the Congestion Management Program became effective with voter approval of Proposition 111 in June, 1990.

The purpose of the Congestion Management Plan land use analysis requirement is to ensure that local jurisdictions consider the regional transportation impact of new development through the land use approval process. The authority for local land use decisions remains the responsibility of local jurisdictions.

All developments within Los Angeles County, including the City of Calabasas, requiring development entitlement where an Environmental Impact Report is required, must submit a project level Congestion Management Plan that addresses land use and transportation. The study must meet the land use analysis program requirements, including traffic impact analysis guidelines, that are required to be adopted by Calabasas by April 1, 1993.

The traffic study is designed to focus on near term impacts and associated improvements, generally the seven to ten year horizon, as compared to the longer 10 to 20 year horizon used for planning.

Pursuant to the Congestion Management Plan, each jurisdiction in the County will be required to adopt a Transportation Demand Management ordinance by April 1. 1993. The Los Angeles County Metropolitan Transportation Authority has circulated a model ordinance to the City of Calabasas which the city is entitled to adopt as is presented or to make specific modifications relevant to the City.

On April 7, 1993, the Calabasas City Council adopted a Trip Reduction and Travel Demand Measure which is in accordance with State Government Code Section 65089 and 65089.3. This ordinance requires new non-residential development to incorporate established standards. These standards are designed to promote the use of alternative transportation modes, such as ridesharing, bicycling, public transit, carpool, and vanpool.

The provisions of this ordinance shall be included in the development approval process for all developments which require discretionary approval. Monitoring to ensure compliance with this ordinance shall occur prior to issuance of a certificate of occupancy.

The focus of the Congestion Management Plan study is a system of principal routes in the County. The Congestion Management Plan legislation requires that the system include all State highways and principal arterials in the County. The Congestion Management Plan states that the study area for an impact analysis should be a five mile radius for arterials and freeways contained in the CMP roadway system. The Ventura Freeway is a freeway link identified as being part of the Congestion Management Plan network, but is the responsibility of Caltrans to monitor. Topanga Canyon Boulevard is also a Congestion Management Plan designated facility that extends through the most easterly portion of the City and study area. Because a predetermined count location is not contained within the City of Calabasas, the City is not obligated to provide annual monitoring data to the Los Angeles County Metropolitan Transportation Authority.

The Congestion Management Plan establishes level of service standards for a regionally significant network of roadways. Impacts of development that would lower the LOS on one or more segments of the Congestion Management Plan network below specified standards must be mitigated such that no LOS standard is further degraded. Generally, unmitigated impacts are expected to be addressed through a Deficiency Plan, which will select mitigations from a list compiled by the SCAQMD. This list is currently expected to focus principally on mass transit and trip reduction programs.

The Congestion Management Plan legislation requires that each county determine local level of service (LOS) standards for its designated system. The Los Angeles Congestion Management Plan level of service standard is LOS E, or the current level if worse than E.

By August 1, 1993, the City of Calabasas is required to certify their conformance with the County's Congestion Management Plan program. Conformance is determined through a review of a checklist that is made available to jurisdictions by the Los Angeles County Metropolitan Transportation Authority. On March 11, 1993 the City of Calabasas adopted a Transportation Demand Management (TDM) Ordinance to conform with the County's Congestion Management Plan (CMP) program. The CMP requires local jurisdictions to adopt a program to analyze the impacts of land use decisions on the regional transportation system, including an estimate of the cost of mitigating associated impacts. The land use program is also required to provide credit for public and private contributions for improvements to the regional transportation system.

The City of Calabasas Land Use Analysis Program ensures that the impact of new development on the regional transportation system is considered in the land use approval process.

B. INFRASTRUCTURE

The Infrastructure and Public Services section examines both public facilities and services such as flood control, water, and wastewater treatment, as well as, privately provided services, such as solid waste collection/disposal and utilities. In this section, information on educational facilities and parks and recreational facilities is also presented.

FLOOD CONTROL

The Los Angeles County Department of Public Works, Hydraulics and Water Conservation Division provides the City of Calabasas with flood control services at the regional level, with regard to flood hazards, groundwater conditions, flood control maintenance and water conservation. Locally, the City is responsible for providing storm drains and minor flood control to protect residents from nuisance flooding conditions.

A floodways map for the Calabasas area was prepared by the Hydraulics and Water Conservation Division prior to city incorporation which defines the water surface and flood limits for the major drainages in the area. Flood limits for the mapping were based on the Hydraulics and Water Conservation Division 50 year storm criteria. Floodways maps are required by the National Flood Insurance Program. The major drainages encompassed by the map include Las Virgenes Creek and Liberty Canyon. The City of Calabasas recently adopted the floodways map by ordinance in order to participate in the National Flood Insurance Program.

The Hydraulics and Water Conservation Division is responsible for city flood protection where regional or subregional storm drain improvements are needed, provided that the improvements do not directly benefit private development. Regional or subregional service responsibility principally involves County participation wherever flooding hazards could occur. The County plans future flood control improvements according to a Master Plan of Drainage program. This is a dynamic program that allows new facilities and improvements to be added to the list of improvement needs as drainage concerns are identified. The program is not fully implemented, particularly in urban areas where storm drain facilities do not meet current standards. However, in Calabasas, this is not a concern due to the past installation of major flood control facilities and storm drains that adequately convey flood waters. According to the Hydraulics and Water Conservation Division, the Calabasas community is free of problem flooding conditions, although local flooding conditions may exist in times of abnormally heavy rainfall.

In addition, the Hydraulics and Water Conservation Division continues to assume storm drain maintenance responsibilities for facilities that were privately constructed (i.e., for specific development projects) but have since been dedicated to the Hydraulics and Water Conservation Division for maintenance purposes. As an example, the lined segment of Las Virgenes Creek north of the Ventura Freeway and other minor storm drain facilities in the City were constructed by private development and have been dedicated to the Hydraulics and Water Conservation Division for maintenance purposes. It should be noted, however, that not all storm drain facilities are dedicated to the Hydraulics and Water Conservation Division for maintenance. Most remain as City or private development maintenance responsibilities.

According to the Flood Insurance Rate maps published by the Federal Emergency Management Agency, the City of Calabasas study area principally falls into flood Zone C, an area of minimal flooding (in excess of 90 percent of the study area). There are a number of areas that are classified as Zone A, areas with 100-year flooding potential. These areas are located in the immediate vicinity of the canyon bottoms, along the alignments of the primary drainage courses, and are generally very small in size, as indicated in Figure III-3, 100-Year Flood Zones. Few areas, adjacent to Zone A, are classified as Zone B, which is defined as those areas between 100 and 500 year flooding.

WATER

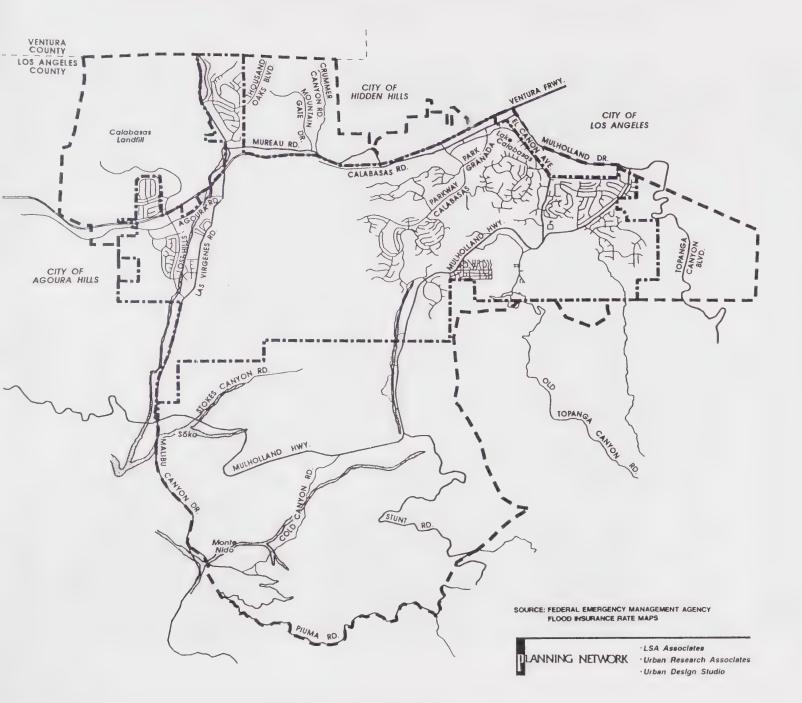
Water Service and Distribution Systems

The City of Calabasas obtains water service from the Las Virgenes Municipal Water District (LVMWD). The LVMWD purchases 100 percent of its potable water supply from the Metropolitan Water District (MWD). No local groundwater sources are utilized. Water that is reclaimed from the Tapia Water Reclamation Facility (tertiary treatment) is distributed throughout the City for irrigation purposes (see discussion under Wastewater). The LVMWD currently distributes approximately 40-55¹ acre-feet of water per day (depending on drought conditions and water rationing) and serves approximately 50,000 people. The service area is approximately 122 square miles in size, serving western Los Angeles County. Included in this service area are the incorporated cities of Westlake Village, Agoura Hills, Hidden Hills and Calabasas.

Water is distributed throughout the District through a network of underground water mains of various sizes with the central spine of the system generally paralleling the Ventura Freeway. Generally, the distribution mains are in place. According to the LVMWD, there are no gaps or problem areas with respect to the distribution system. Developers of new projects are responsible for constructing all needed onsite improvements including service distribution lines, service connections, pump stations, and tanks. For each new project, water demand for the development is calculated and determined by the District in a report funded by the developer. The water demand is a function of the land use type and intensity, and the amount and type of irrigation.

At the western end of the District is Westlake Reservoir. It includes a 10,000 acre-foot capacity seasonal storage reservoir. Also located at Westlake Reservoir is a 15 million gallons per day (mgd) filtration plant and major pumping station. Water contained in the Westlake Reservoir has been previously treated through the filtration plant. In the winter, when there is less demand for water, water is pumped into the reservoir and stored. During the high water demand season (e.g., summer), water is pumped through the filtration plant and back into the system to augment deliveries from the MWD.

An acre-foot of water would cover one acre of land to a depth of one foot. It is approximately 326,000 gallons.





CITY OF CALABASAS GENERAL PLAN

FIGURE III-3

100-YEAR FLOOD ZONES

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



AREAS OF 100-YEAR FLOODING







Water service deliveries to the District are based on an allocation quota from MWD. The allocation varies depending on the overall water availability to MWD from its sources. Because the allocation varies, during long-term drought conditions, the allocation could fall short of the demand. Consequently, future allocations necessary to meet water demand for new development could fall short of meeting an adequate supply. Recently, MWD encouraged its member agencies, including the LVMWD, to impose emergency mandatory water conservation measures, due to a sixth year of continuous drought. Included in the program to conserve water was the adoption of an urgency ordinance, which included a moratorium on all new connections, effectively suspending the growth potential until the restriction was lifted. Highlights include restriction hours of exterior watering, restrictions on washing down of sidewalks, driveways, etc., no draining or filling of swimming pools, and imposing a new financial rate structure to penalize those not meeting target conservation goals. The goal of the water conservation measures was to produce a 27 percent savings in total water consumption.

In the future, unless additional infrastructure is developed to deliver additional supply, there is the potential that the MWD will impose similar recommended or mandatory emergency water conservation measures on their member agencies, including limits on allocation, and interruptable deliveries, should severe drought conditions prevail.

The LVMWD also requires new development to comply with Ordinance No. 11-86-161 as amended by Ordinance No. 3-89-173 regarding water conservation measures. The measures include prevention and elimination of all waste or leakage of water; imposes requirements on new plumbing fixtures for toilets and urinals, showerheads, and non-residential lavatory faucets, requires fixtures to have a certification of volume by a reputable independent testing organization; requires that all fixture installations be subject to compliance inspection; and imposes water conserving landscaping requirements in model home displays.

Water Consumption Patterns

The Water Master Plan was prepared by Boyle Engineering as needed to identify future capital improvement requirements within the LVMWD. The plan is based on population projections provided by the Southern California Association of Governments, as well as local General Plan land use plans and projections. With these projections, the plan identifies the types and sizes of facilities required (i.e., transmission mains, reservoirs, pump stations) to support the long-range development potential within the LVMWD. Since the plan was prepared, very little development has occurred, and, therefore, the majority of the proposed improvements have not yet been implemented.

The Potable Water Master Plan prepared contains water consumption factors for the LVMWD. These factors are provided in Table III-5.

Table III-5
Average Day Demand Criteria

Туре	Density [ver. Day Demand Person od/person)	Persons per Unit	Aver. Day Demand Unit (gpd/unit)
	RESIDENTIAL DEMAND	CRITERIA		
High Density	> 10	218	2.0	436
Medium Density	4 - 10	250	3.0	750
Low Density	< 4	250	3.5	875
Large Estate	± 1¹	350	3.5	1,228
Ranchette (similar to Hidden Hills)	< 11	640	3.5	2,250
Office Space				3,800 gpd/ac
Industrial (Light)				3,800 gpd/ad
Industrial (Heavy)				6,500 gpd/ad
Restaurant (Gourmet)				8 gpd/sea
Restaurant (Cafeteria)				47 gpd/sea
School				1,100 gpd/ad
Hotel/Motel (Economy)				134 gpd/room
Hotel/Motel (Superior)				240 gpd/roon
Hotel/Motel (Luxury)				470 gpd/roon
Hospital				600 apd/be

Source: Potable Water Master Plan for LVMWD.

The data presented above (i.e., demand criteria) was applied to the existing land uses to determine total existing water consumption. Accordingly, land uses within the city limits of Calabasas currently consume approximately 8 million gallons of water per day.

There are no problems with water pressure within the LVMWD service area. Potential problems are remedied during the conceptual design phase by requiring developers to submit a water system design report, which addresses the potential issues, including water pressure. Where water pressure is a concern, the LVMWD would require a developer to build a storage tank, or connect into an existing distribution system that has adequate pressure.

Including a "significant" amount of irrigable area.

WASTEWATER

The Las Virgenes Municipal Water District (LVMWD) is also responsible for wastewater treatment and trunk sewers for wastewater collection services in the City of Calabasas. Local intercept collector sewers are provided by the City of Calabasas which connect with the District's trunk lines. Most of the wastewater flows by gravity trunk mains; however some pumping and use of force mains is needed in specific locations. In addition, there is a sewer project taking place in Calabasas Highlands. Although the majority of the City is connected by sewers, septic systems serve several rural areas in the study area. Areas currently on septic tanks are concentrated in the northeastern portion of Calabasas, near the Los Angeles city limits. An assessment district has been set up in this area and fees are being assessed to residents on septic systems for the ultimate connection by sewer laterals into the LVMWD trunk lines.

The District covers four sewer zones referred to as Zones U-1, U-2, U-3 and Zone B. The City of Calabasas is contained within Zones U-1 and U-2. The U-1 Zone encompasses the natural drainage basin for Malibu Creek and its tributary creeks. This area generally covers all of the lands from the Calabasas Grade west into parts of Ventura County. Wastewater from this area flows by gravity mains to the Tapia Water Reclamation Facility.

The U-2 Zone covers the area east of the Calabasas Grade to the border with the City of Los Angeles and includes parts of the cities of Calabasas and Hidden Hills. Wastewater from this zone flows by a combination of gravity mains and force mains to two lift stations. Some of the wastewater is released to the City of Los Angeles for treatment and the remainder is pumped over the grade to flow by gravity to the Tapia treatment plant.

LVMWD operates a treatment plant (Tapia Water Reclamation Facility) on Malibu Canyon Road, approximately five miles south of the Ventura Freeway. The Tapia facility is designed to treat an average capacity of ten million gallons per day (mgd) through tertiary treatment (aerobic-activated sludge process, followed by filtration and disinfection). The facility currently serves approximately 70,000 people. The Tapia treatment plant services both the U-1 and U-2 Zones described above. Treatment capacity is shared between the LVMWD (70 percent allocation) and the Triunfo County Sanitation District (30 percent allocation) in Ventura County. A Joint Powers Agreement between the two agencies has been established that specifies the allocation proportions. 1992 flows are estimated at approximately 7.0 mgd or at 70 percent of design capacity (design capacity is stated in terms of average daily capacity).

The LVMWD plans to expand the treatment plant in 1993-94 to accommodate approximately 16.2 mgd, in conjunction with the Regional Facilities Expansion Plan. This plan was prepared to determine the Tapia treatment plant expansion requirements and the proposed composting plant/sludge generator facility proposed along Las Virgenes Road. The current treatment plant expansion is expected to be complete in summer, 1993, while the composting plant is expected to be complete in spring, 1994.

In addition to the capacity expansion, additional improvements are projected to be in place by the spring 1994. These include the installation of new anaerobic digesters which process sludge that is currently being spread at Rancho Las Virgenes, where it is injected into the soil. In addition, a new composting facility will be built to combine the processed sludge with organic material to produce compost that can be used for landscaping purposes. In summary, no capacity problems are envisioned with regard to wastewater treatment in the Calabasas study area.

Reclaimed water produced from the Tapia Plant is pumped into distribution lines to the east and west of the main distribution pump station near the treatment plant site. The main distribution pump station for the reclaimed water is also located at the Headquarters site and pumps reclaimed water both east and west through separate distribution systems. To the east, reclaimed water is available into central Calabasas. Pipeline projects are underway to extend the system to serve a wider area. The new pipeline, together with the concurrent construction of a new storage reservoir system, will allow further expansion of the system, especially north of the Ventura Freeway. The distribution system to the west is more extensive, covering most of the cities of Agoura Hills, Westlake Village and Lake Sherwood in Ventura County.

Major pipeline expansions are planned to include the Oak Park and North Ranch areas. Reclaimed water is utilized for irrigation in landscape districts, greenbelt areas, golf courses, parks, schools, and at the Calabasas Landfill. The District distributes approximately 5.0 mgd of reclaimed water on an annual basis to irrigate these areas. It should be noted that reclaimed water shall also be used (where available) in lieu of potable water for construction activities such as compaction and dust control as deemed acceptable by the Regional Water Quality Control Board.

The LVMWD utilizes a single generation factor for various land uses within the LVMWD for wastewater generation. This factor is 325 gallons per day per equivalent residential unit and applies to all land use categories (residential, commercial, industrial).

From the data presented above, the total wastewater generation for the City of Calabasas was determined. The Equivalent Residential Units were applied to the various land use category totals to determine that approximately 2.8 million gallons per day are being generated in the City of Calabasas.

UTILITIES

Electricity

Electrical power to the Calabasas General Plan study area is provided by the Southern California Edison Company (SCE). SCE obtains electricity from various generating sources that utilize coal, nuclear and hydroelectric resources to generate power. This power is transmitted over 66kV (kilovolts) lines to the Valdez Substation located near the Los Angeles City boundary (at Park Ora and Park Sorento) where it is distributed to its customers via 16kV lines. These 16kV lines are generally located along both sides of the Ventura Freeway. Nearly all 16kV lines in Calabasas have been placed underground.

SCE has plans to provide future electrical service in conjunction with planned growth. Generally, SCE has identified circuit upgrades where future growth is anticipated. It is the objective of SCE to plan ahead for development and avoid conditions which exceed service capacities. Consequently, the current and projected facilities are or will be considered adequate to meet the City's electrical demand.

The South Coast Air Quality Management District (SCAQMD) publishes consumption factors (Air Quality Handbook) for electricity consumption. These factors are as follows:

Land Use	Use Factors ¹
Residential (all types)	6,081 kilowatts/unit/year
Mixed Commercial	29.8 kilowatts/sf/year
Retail Commercial	11.8 kilowatts/sf/year
Institutional	8.8 kilowatts/sf/year
Office	8.8 kilowatts/sf/year

Source: SCAQMD, Air Quality Handbook, September 1992.

Total electrical usage for the City of Calabasas was determined by applying the above use factors to individual land use categories. This calculates to approximately 70.3 Million kilowatts of electrical consumption on an annual basis, or 192,529 kilowatts per day.

Natural Gas

Natural gas is provided to the General Plan study area by The Gas Company. Subsidiaries oversee transmission mains and local distribution lines.

According to The Gas Company distribution lines extend throughout the study area where necessary to serve existing development. A 14-inch transmission main extends down Calabasas Road (parallel to Ventura Freeway) from the intersection of Mureau Road. A regulator station at Calabasas Road and El Canon Avenue reduces the pressure from 300 pounds per square inch (psi) to a medium pressure 40 psi.

The Gas Company is mandated by the Public Utilities Commission to provide natural gas to all areas where service is available. To plan for future growth, The Gas Company modifications are anticipated. To a large extent, The Gas Company utilizes environmental impact reports prepared on land development projects to assist in their near-term and long-term service forecasting. According to The Gas Company, the existing and planned facilities are adequate to meet the City's natural gas demand.

The SCAQMD publishes consumption factors (Air Quality Handbook) for natural gas consumption. These factors are as follows:

¹ Annual kilowatts of electrical use.

Land Use	Use Factors ¹
Residential (R-1/RR)	79,980 cf/unit/year
Residential (R-2, R-3, R-4)	47,016 cf/unit/year
Commercial	34.8 cf/sf/year
Institutional	24.0 cf/sf/year
Office	24.0 cf/sf/year

Source: SCAQMD Air Quality Handbook, September 1992.

Natural gas consumption was calculated by applying the above use factors to land use. In Calabasas, the current natural gas consumption is approximately 740 million cubic feet per year, or approximately 2 million cubic feet per day.

Telephone

Telephone service to the Calabasas study area is provided by Pacific Bell (PacBell). According to PacBell, the existing service to the community meets or exceeds their current demand for telephone service.

PacBell plans their infrastructure to accommodate future development. It is their objective to oversize telephone infrastructure as much as possible to avoid upsizing when new development occurs. As a result, line capacity remains adequate longer than would occur if the infrastructure were developed in conjunction with new development. For new small to medium sized developments (e.g., 50-100 residential units), new service can normally be accommodated with existing line infrastructure. However, for large-scaled planned developments (e.g., 1,000 residential units), PacBell cannot readily accommodate the demand and usually requires infrastructure improvements, extensions or upsizing.

Solid Waste

Three waste disposal companies serve the City of Calabasas: Las Virgenes Disposal, Hillside Rubbish, and Calabasas Park Disposal.

Solid waste is disposed at the Calabasas Landfill, located adjacent to the Ventura Freeway on Lost Hills Road in the northwest portion of the City's General Plan study area. The next closest landfill is the Sunshine Canyon Landfill located at 14747 San Fernando Road, Los Angeles.

¹ Annual cubic feet of natural gas use.

Calabasas Landfill property is owned by the County of Los Angeles and is operated by the Sanitation Districts of Los Angeles County under a Joint Powers Agreement. The landfill is operated in compliance with federal, State and local standards in order to control or eliminate any potential impacts on nearby residents. It is open to public access from 8:00 a.m. to 5:00 p.m., six days a week (Monday through Saturday), with the exception of holidays. Refuse is quickly compacted; at the end of each work day all refuse is covered with a confining layer of cover material 6 to 12 inches in depth. Various specific measures are employed to control potential nuisances due to noise, odor, litter, dust and vectors, and to minimize landfill traffic and overall visual impacts. In addition, specific systems have been constructed to monitor and control landfill gas migration, and to monitor and protect groundwater quality.

Calabasas Landfill began operating in 1961. It currently accepts only non-hazardous municipal solid waste. In the past, this site also accepted limited quantities of liquid hazardous wastes; however, this practice was discontinued in July, 1980. Effective February, 1991, the Los Angeles County Code was amended (Ordinance No. 910003) to limit refuse disposal sites to areas in an identified wasteshed area. The wasteshed area generally includes the Cities of Calabasas, Hidden Hills, Westlake Village, Thousand Oaks, portions of the City of Los Angeles and portions of unincorporated Los Angeles County adjacent to the landfill.

The landfill currently accepts approximately 2,500 tons per day of refuse or approximately 800,000 tons per year. The amount of refuse collected daily varies throughout the year depending on the season and is greater during the summer months. The landfill operates under a maximum daily tonnage limit of 3,500 tons per day. Approximately 14.4 million tons of refuse (July, 1992) have been placed since the landfill opened. The remaining life of the site is estimated to be approximately 20 years.

Following the completion of landfill operations, it is planned that the site will be developed as open space and/or for park and recreation purposes. The exact nature of this ultimate use has not yet been determined.

The State of California is particularly concerned with long-term disposal capacity. In response to this concern, Assembly Bill 939 was adopted per Public Resources Code sections 41000 and 43000. AB 939, the California integrated Waste Management Act of 1989, establishes state-mandated local integrated waste management programs.

By January 1, 1991, each county must prepare a source reduction and recycling element for its unincorporated areas. By July 1, 1991, each city must prepare, adopt and submit to the county a source reduction and recycling element. The elements must include the following components:

- A waste characterization study;
- A source reduction component;
- A recycling component;

- A composting component;
- A solid waste capacity component;
- A public information component;
- A funding component;
- A special waste component; and
- A household hazardous waste component.

Cities and counties are required to divert 25 percent of their solid waste from landfills through source reduction, recycling and composting by January 1, 1995. By January 1, 2000, a 50 percent diversion is mandated. Alternative goals may be allowed by the Board where the 50 percent goal is proven not to be feasible.

Pursuant to the AB 939 requirements, on February 10, 1993, the City adopted an ordinance containing provisions and a plan to reduce waste on a city-wide basis. The ordinance consists of three components: Source Reduction Recycling Element, Household Hazardous Waste Element, and Solid Waste Generation Study. Details on these components are as follows:

- Source Reduction Recycling Element. This summarizes the specific programs regarding how the City is required to comply with waste reduction goals or diversion goals (25 percent by 1995, and 50 percent by year 2000).
- Household Hazardous Waste Element. This establishes a program to reduce household wastes. The City has adopted the County of Los Angeles Household Hazardous Waste Element.
- Solid Waste Generation Study. This is a compilation of background data on various wastes and waste sources. The data is categorized by various waste types.

Monitoring of the success of the waste reduction efforts is conducted by the County. This occurs at both the Calabasas Landfill where wastes are deposited and by local haulers who segregate wastes prior to disposal or recycling.

The City also has conducted an annual Christmas tree recycling program. In addition, the County Sanitation District has conducted household hazardous materials roundups in Calabasas (two roundups have been conducted).

The City has prepared a solid waste curbside recycling program. The program is currently in review and will be considered for approval by resolution by the City Council in the near future.

C. EDUCATION FACILITIES

EDUCATIONAL FACILITIES

Elementary and High School District

The City of Calabasas is served by the Las Virgenes Unified School District (LVUSD), which maintains eleven schools within the district boundaries. District boundaries encompass all of the City of Calabasas and extend west of the City, serving adjacent communities. Within the City of Calabasas, the District maintains four elementary schools (K-5), one middle school (6-8), one high school (9-12) and one continuation high school. The schools in the District serving the study area are indicated on Figure III-4.

Several of the schools within the District are at, or over, capacity, but continue to operate with the use of portable classrooms (see Table III-6).

Table III-6
Student Enrollment and School Design Capacity
Calabasas General Plan Study Area

	Fail, 1992 Enrollment	Design Capacity without Portable Classrooms	Design Capacity with Portable Classrooms
Elementary Schools			
Round Meadow	465	N/A	5481
Lupin Hill	661	532	652 ²
Chaparral	500	470	590 ³
Bay Laurel	406	N/A	5484
Meadow Oaks ⁶	540	N/A	N/A
Middle School			
A. E. Wright	1,315	1,200	1,3206
High Schools			
Calabasas	1,298	1,712	N/A
Indian Hills Continuation	85	100	N/A
Viewpoint ⁶	554	N/A	980

Source: LSA, November 1992.

Eight portable classrooms are included in the school design.

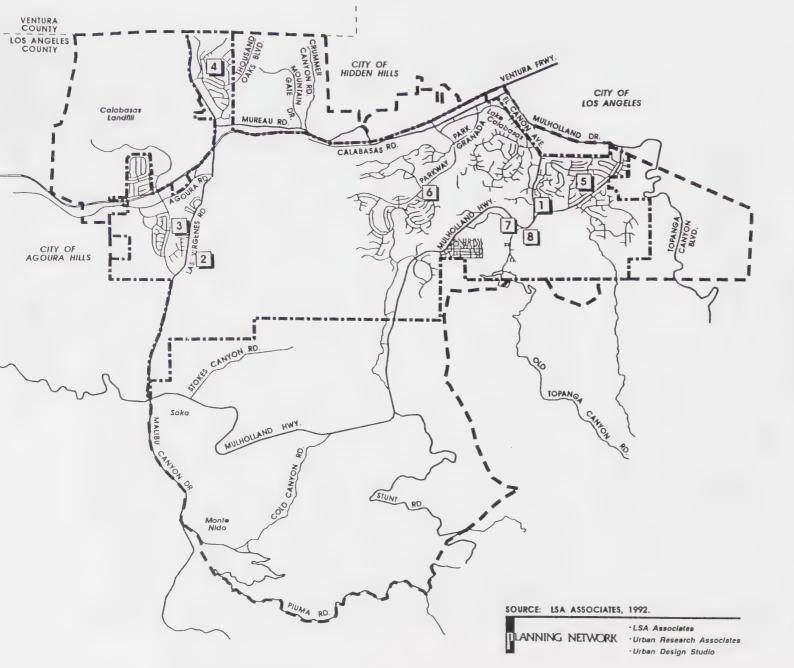
School is over capacity with five portable classrooms.

School contains four portable classrooms.

⁴ Eight portable classrooms are included in the school design.

⁵ School is at capacity with five portable classrooms.

These are private schools and are not part of LVUSD.





CITY OF CALABASAS GENERAL PLAN

FIGURE 111-4

SCHOOLS

LEGEND

1.0

CITY LIMITS



SPHERE OF INFLUENCE



CALABASAS HIGH SCHOOL



INDIAN HILLS CONTINUATION HIGH SCHOOL



A.E. WRIGHT MIDDLE SCHOOL



LUPIN HILL ELEMENTARY SCHOOL



CHAPARRAL ELEMENTARY SCHOOL



BAY LAUREL ELEMENTARY SCHOOL





MEADOW OAKS SCHOOL



VIEWPOINT SCHOOL





Student generation rates utilized by the LVUSD for planning purposes are based on grade level (see Table III-7). These rates represent the number of students expected to be generated by individual households.

Table III-7
Student Generation Rate
Calabasas General Plan Study Area

		10 m	Student Generation Rate ¹
Elementary Schools (K-5)			.61
Middle Schools (6-8)			.22
High Schools (9-12)			.18

Source: LSA, November 1992.

The LVUSD plans for additional facilities according to their Ten-Year Facilities Plan. This plan identifies how school capacity deficiencies are addressed, including the use of State-mandated developer fees and negotiation of additional fees when needed to resolve capacity problems, that cannot be accommodated by the State-mandated fees. Presently, the LVUSD has plans to provide an elementary school in conjunction with the Baldwin development (Calabasas Park West), and expand Calabasas High School (final phase of a four-phased project). In addition, there is also a potential for an additional middle school, although the LVUSD has not yet made this commitment. If needed, one of the existing elementary schools would be expanded and converted into a middle school and a new elementary school, to replace the existing school, would be constructed.

Meadow Oaks School is a private elementary school located at 23456 Mulholland Highway. The school currently serves nursery and pre-school grades and kindergarten through sixth grade and draws from a regional service area (from Thousand Oaks to west Los Angeles). The school administration considers capacity by classroom rather than by total the school facilities. The classes are designed for a capacity of 22 students. If a particular grade of classes has sufficient demand and no additional capacity is available, then the school makes an adjustment to another grade (e.g., deletes a kindergarten class) as needed to add more capacity. For school year 1993-4, the school plans to add seventh grade, followed by eighth grade in year 1994-5. This will be accommodated on a 17-acre parcel that is attached to Meadow Oaks School. Ultimately, the administrators will operate two separate schools (i.e., an elementary school and a middle school) on the same school grounds.

Viewpoint School is a non-profit tuition-based school located at 23620 Mulholland Highway. The school serves grades kindergarten through grade twelve and is college preparatory. This school also offers summertime programs, which include summercamp for young children (K-3), a sports camp for grades 4-6, and an academic program for grades 7-12. The current enrollment of 554 students is approaching its design capacity

of 590 students. There are currently no plans to increase the schools' capacity, as regulated by a conditional use permit originally approved by the County of Los Angeles. In addition to the collection of tuitions, the school holds fund raising events and accepts tax-exempt contributions as its revenue sources.

College Programs

Community college educational services are generally provided locally by Los Angeles Pierce College located in Woodland Hills. This facility is the closest community college to Calabasas residents. Pierce College is a State supported facility whose operating costs are augmented by enrollment fees. Students must meet state residency criteria, or pay out-of-state tuition.

Approximately 18,000 students currently attend Pierce College. The school is considered to be operating at, or near, its design capacity. Pierce College is one of nine colleges contained within the Los Angeles Community College District. Its service area includes the west San Fernando Valley area, including the City of Calabasas.

LIBRARY

Library services to the City of Calabasas are provided by the Los Angeles County Regional Library system. The library system is comprised of five regions which includes 92 libraries throughout the County. The system is set up to interact with the various library resources throughout the system. With this system, materials contained in one library can be accessed through any other library in the network.

The Calabasas area is served by the 7,000 square foot Las Virgenes Regional County Library, located at Kanan Road and Ventura Freeway in the adjacent City of Agoura Hills. This facility circulates an average of approximately 30,000 items per month. Other libraries are located in the San Fernando Valley which also serve the library needs of the region.

In addition to the regional library, the City of Calabasas maintains a library service center or outreach library that is contained within the Civic Center facility. This small library contains approximately 1,200 items for loan, including videos, tapes, and recent releases of popular books.

The County Regional Library System also utilizes a bookmobile to augment their service to the public in Calabasas, Hidden Hills and Westlake Village. This bookmobile contains 5,200 items for loan and serves the City of Calabasas at five locations. These locations are Lost Hills Road and Cold Springs Street (Wednesday), Mulholland Highway and Canyon Drive (Wednesday), Park Ora and Park Helena (Wednesday), Ruthwood Drive and Thousand Oaks Boulevard (Friday) and Park Sorrento and Park Granada (Saturday).

Recently, the Cities of Calabasas and Agoura Hills jointly agreed to finance construction of a new 25,000 square foot regional library for use by the two cities. The new library, when constructed, would be located in the City of Agoura Hills on a 6.1 acre site that has previously been dedicated. The existing Las Virgenes Library would cease to function and the building will be sold with the proceeds divided between the cities. All of the resources (i.e., books, videos, etc.) will be transferred to the new library. The County will continue to provide staff and maintenance responsibilities as they currently provide, resulting in no change in service operation. Plans for the building architecture are currently under preparation.

The adequacy of library facilities is judged on a library by library basis, due to the lack of per capita/square foot standards to evaluate facility adequacy. According to the County Community Librarian, the Las Virgenes Regional County library services are operating at acceptable service levels. However, the facility is experiencing strains on the capacity limits in several areas including crowded parking conditions, and long check out lines. Ultimately, when the new, larger joint city-financed facility becomes operational, the service levels are expected to contain residual service capacity to accommodate future growth forecasts.

D. PARKS AND RECREATION

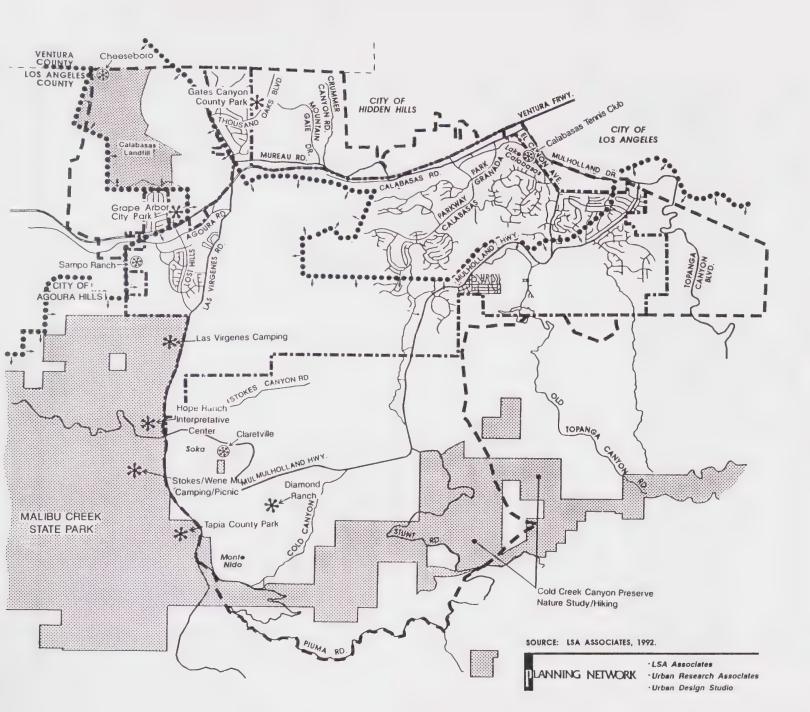
REGIONAL PARK AND RECREATIONAL FACILITIES

In the Calabasas area, regional parks include both national and State facilities. These facilities are described in the following sections.

Santa Monica Mountains National Recreation Area

The Santa Monica Mountains National Recreation Area is administered by the National Park Service, which is provided to serve the public. A total of 26 officially designated parks, preserve locations, beaches, natural area and unique features are contained within the Santa Monica Mountains National Recreation Area boundaries. These consist of a combination of County, State and national park/recreation facilities (see Figure III-5) and are identified below:

	Arroyo Sequit Natural Area	Peter Strauss Ranch (Lake Enchanto)
88	Castro Crest Site	Site
	Charmlee County Natural Area	Point Dume State Beach
	Cheseboro Canyon Site	Point Mugu State Park
	Circle X Ranch Site	Rancho Sierra Vista/Satwiwa Site
	Cold Creek Canyon Preserve	Red Rock Canyon
	Coldwater Canyon Park	Rocky Oaks Site
	Diamond X Ranch Site	Solstice Canyon
	Franklin Canyon Ranch Site	Topanga State Park
	Leo Carillo State Beach	Tapia County Park
	Los Encinos State Historic Park	Wilacre Park
	Malibu Creek State Park	Will Rogers State Historic Park
	Malibu Lagoon State Beach	Zuma Canyon Site
	Paramount Ranch Site	





CITY OF CALABASAS GENERAL PLAN

FIGURE III-5

RECREATIONAL FACILITIES

LEGEND

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CITY LIMITS



SPHERE OF INFLUENCE



PUBLIC RECREATION OR PRESERVATION LANDS



RECREATIONAL ACTIVITY SITES



SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA



HANOHAL RECREATION AREA



PROPOSED ACTIVITY SITES





The Santa Monica Mountains National Recreation Area, established in 1978 by Congress. is subject to the same mandate as any National Park Service administered park, and is a national park unit. The objectives of the Santa Monica Mountains National Recreation Area are the same as a national park and include resource management, interpretation and law enforcement. The Santa Monica Mountains National Recreation Area generally is bounded by the Pacific Ocean to the south, Point Mugu to the west, the Ventura Freeway to the north (although some of the Recreation Area does extend north of the freeway into the northwest Calabasas area) and Griffith Park to the east. Consequently, major portions of the General Plan study area are contained within the Santa Monica Mountains National Recreation Area. Within the Santa Monica Mountains National Recreation Area, the National Park Service owns approximately 18,000 acres with plans to acquire more land as funds allow. According to the 1984 Land Protection Plan, the National Park Service, in concert with the State of California, intends to acquire an additional 48,682 acres of land. Because all of Calabasas is contained within the Santa Monica Mountains National Recreation Area the National Park Service is interested in the City's planning efforts. Land use decisions made by the City could negatively affect the National Park Service objectives for managing resources within the Santa Monica Mountains National Recreation Area, if development is approved or policy formulated that is contrary to National Park Service objectives.

The National Park Service manages the Santa Monica Mountains National Recreation Area through implementation of several documents. These are the Comprehensive Plan, the General Management Plan and the Land Protection Plan, which are described below.

The Comprehensive Plan identifies public and private uses which are compatible with the resource management objectives; a specific minimum acquisition plan for strategic and critical sites to be acquired by the federal government for public recreational and other related uses; a program for complementary use of State and local authority to regulate the use of lands and water in the Santa Monica Mountains Zone to the fullest extent practicable; and a recreation transportation system, including trails, bikeways, roadways, transit services, and transportation centers.

According to the Comprehensive Plan, incompatible land uses are generally those which:

- Modify large resource areas;
- Intrude significantly on critical habitat or wildlife corridor areas;
- Endanger significant ecological areas;
- Eliminate or significantly impact the few remaining activity sites for servicing visitors;
- Dramatically alter the character of the Mulholland Scenic Parkway Corridor;
 and
- Block trail corridors shown in the General Management Plan.

Compatible land uses are generally:

- Infill uses at densities allowed by local and state jurisdictions;
- Commercial services:
- Trail access points;
- Recreational support services; and
- Low density residential development that maintains the significant natural and cultural values.

The General Management Plan for the Santa Monica Mountains National Recreation Area was adopted in April, 1982. The purpose of the General Management Plan is to present the goals for managing the recreation area and to identify strategies to achieve them.

As included in the General Management Plan, the general planning objectives for the Santa Monica Mountains National Recreational Area are presented below:

- Protect and perpetuate the natural, cultural and scenic resources, giving special attention to endangered and threatened plants and animals, significant ecological areas, and Native American and historic sites.
- Work actively to eliminate, minimize, or mitigate the impact of threats to natural and cultural resources and to improve regional air and water quality.
- Provide a wide variety of outdoor recreation and learning opportunities that are reflective of the diversity of the resources in the mountains and along the coast.
- Ensure the opportunity for a full range of experiences to serve regional and national visitors, including the young, the elderly, the transit-dependent, and people from a diversity of ethnic and social cultures.
- Establish the facilities necessary for information/orientation, recreation, interpretation, education, and recreation area maintenance and operations; adapt existing structures or have such facilities provided by others whenever possible.
- Provide the opportunity for people, especially urban residents and landowners in the mountains, to become aware of the unique and inherent values of the resources of the mountains and coast and the opportunities and limitations they present for private stewardship.

- Recognize and enhance the opportunities for creating partnerships and sharing responsibilities with state and local governments and the private sector for protecting resources and providing recreational and educational services in ways appropriate to the rules, authorities and capabilities of the partners.
- Participate with local jurisdictions and landowners in the mountains to create a sense of private land stewardship in the recreation area.
- Be a neighbor to other landowners, helping to protect their interests and rights and taking into account their individual concerns.
- Recognize the importance of the relationship between mountain and coastal resources in all programs and activities.
- Work actively for the creation of efficient and varied ways to move people to, through, and around the recreation area.

The other plan that controls actions within the Santa Monica Mountains National Recreation Area is the Land Protection Plan, prepared in June, 1984, and updated in January, 1987. The Land Protection Plan includes an approach to identifying lands desired for acquisition by the National Park Service for the purpose of protecting significant natural, cultural, and scenic resources and to provide for public recreational and educational use of the Santa Monica Mountains National Recreation Area.

The Land Protection Plan outlines several alternatives for land protection including:

- Cooperative agreements between the National Park Service and other agencies;
- Federal land use regulation via an advisory role;
- State and local land use regulation;
- Private stewardship and cooperative planning;
- Lot reconsolidation:
- Transfer of development rights;
- Williamson Act;
- Compatible private recreation;
- Protection of public lands by agencies other than the National Park Service;
 and
- Acquisition (both fee and easement).

It should be noted that fee acquisition will most likely be recommended when other methods of protection have been found to be inadequate, inefficient or ineffective to most management needs. Fee acquisition is reserved for those areas where:

- the General Management Plan calls for a significant visitor use facility to be managed by the National Park Service;
- critical natural resource values cannot be adequately protected by other means;
- critical scenic or cultural resources cannot be protected in other ways;
- important trail connections are necessary to provide for visitor enjoyment;
- intense National Park Service management is required to preserve historic and archaeological resources, eliminate exotic species, or conduct other activities which substantially conflict with private use; and
- other alternative methods to protect important parkland values would not be cost effective. Proposed acquisition areas are illustrated on page 35 of the Land Protection Plan.

State Parks and Recreation

The California Department of Parks and Recreation has developed Malibu Creek State Park, located along Las Virgenes Road, just south of Mulholland Highway. The 7,000-acre park is largely wilderness with active hiking trails and picnic areas that are accessible to the handicapped. The park also maintains a lake where swimming and wading are permitted.

The California Department of Parks and Recreation also administers a number of other State Parks in the Santa Monica Mountains. No new parks are planned for acquisition by the California Department of Parks and Recreation. In addition to State Parks lands, the State owns a number of other lands in the mountains. Most of these lands are located in the southern portion of the General Plan study area in the steep hillsides adjacent to Stuart Road. In total, the State owns approximately 35,000 acres within the entire Santa Monica Mountains National Recreation Area.

Santa Monica Mountains Conservancy

The Santa Monica Mountains Conservancy is a State Agency involved with resource conservation and preservation efforts in the Santa Monica Mountains. Their principal role is to identify and acquire lands. The Conservancy relies on the Santa Monica Mountains Comprehensive Plan to determine which lands to acquire. The lands are then dedicated to the National Park Service or California Department of Parks and Recreation who assumes long-term responsibility for the lands. Land acquisition funding is obtained from four sources. These are: Proposition 70, a Statewide parkland bond issue in 1987; Proposition 117, a Statewide mountain lion protection initiative in 1989; Los Angeles County Measure A, in 1992; and supplemental funding apportioned by Congress to the

National Park Service, who utilizes the Conservancy to acquire lands in the Santa Monica Mountains National Recreation Area. The Conservancy also evaluates local government action to determine consistency with the Santa Monica Mountains Comprehensive Plan. Projects determined to be consistent with the Comprehensive Plan are eligible for the National Park Service or conservancy managed grant programs.

COMMUNITY PARKS

Until incorporation, the Los Angeles County Parks Department was responsible for providing local park service. The County developed approximately 10 acres of local park area (two parks) to serve the Calabasas area, which are described below.

CITY PARKS

The County constructed Grape Arbor Park, originally as a roadside rest area, and converted the facility into a 3-acre neighborhood park. The facility is located at 5100 Parkville Road, and includes a comfort station, paved parking lot, grape arbor with picnic tables, sand volleyball courts, playground landscaping and security lighting. The grapes were taken from cuttings from the Old Plaza, and the San Gabriel and San Fernando Missions. Upon incorporation, the park was transferred from the County's control to the City of Calabasas.

Grape Arbor Park

The Grape Arbor and Gates Canyon Parks are classified as Neighborhood Parks and have a service radius of approximately 1/2-mile. They are intended to serve between 1,250 and 5,000 residents. If these guidelines are applied, only the area in the City north of the Ventura Freeway is served by local parks. The area south of the Ventura Freeway remains deficient of local park service. However, the City has plans to develop additional park facilities throughout the City. These are as follows:

- Lost Hills Park is planned as an 8-acre park located at the intersection of Lost Hills Road and Las Virgenes Road, adjacent to Malibu Creek State Park. The City will be conducting a series of community workshops for the Park Master Plan for the purpose of identifying the types of facilities to be developed in the park. Although the design plans for the park have not yet been prepared, this park will have a number of natural features, including riparian habitat from Las Virgenes Creek, and could be designed for natural and interpretative purposes, in addition to active recreational facilities. It is expected that park construction could be initiated by fall 1993.
- **Braemar Park** is a planned 1.7-acre vest pocket park located at Mulholland Highway and Parched Drive. This park will be constructed by a local developer in the Mulwood community of Calabasas. Design plans have been completed and construction is expected by the end of summer, 1993.

An existing privately-owned 7.5-acre tennis and aquatic center, located on Park Sorrento at Park Granada (on Lake Calabasas), is in foreclosure, thus presenting an opportunity for the City to acquire an existing recreation facility. At present, the ultimate disposition (including ownership and improvement objectives) of this facility has not been resolved.

Los Angeles County Neighborhood Parks

The County currently owns Gates Canyon Park located at 29801 Thousand Oaks Boulevard, just outside of the City boundary, but within the General Plan study area. However, the City will acquire this by end of summer 1993. This 6.96 acre local park is reasonably accessible to city residents and consists of a comfort station, lighted tennis and basketball courts, children's play apparatus, shade shelter, jogging path, fitness station, par course, turf, trees, and a paved parking lot. Future plans to improve the park include a recreation/activity building, multi-purpose field, and picnic facilities.

Los Angeles County Regional Parks

The County of Los Angeles does not currently own or operate any community regional facilities within the General Plan study area. Future facilities are dependent on funding sources, including the park bond measure, which was passed in November, 1992. Funds are now available to construct a recreation center with tennis courts, a regional youth baseball facility, and mountain and canyon acquisition in Los Angeles County.

PRIVATE RECREATIONAL FACILITIES

Approximately 42 private residential enclaves are managed by homeowner's associations in the City of Calabasas. These enclaves typically have private recreational facilities centrally located within the enclave developed for use by the residents. Most of the facilities consist of swimming pools, spas, barbecue/picnic facilities and small turfed areas. The private recreation facilities serve an important function in the City of Calabasas, by relieving some of the local park and recreation demand. Although not specifically considered in determining if local park demand is satisfied (i.e., in conjunction with applying the County/National Recreation and Parks Association standards), their presence assists in reducing local park land requirement by providing local park acreage.

However, according to the Community Services Director, because of the significant short-age of local park land in the City (e.g., when compared to the National Recreation and Parks Association standards), purely factoring in the private land acreage will not offset the local parkland shortfall. In addition, consideration of private recreational facilities and acreage for this purpose is diluted because 1) recreational facilities behind gated communities can only be accessed by residents within that community, 2) generally, recreational programming does not occur for those facilities, and 3) there is no opportunity for socialization with persons outside of the community, such as would occur with public park facilities.

Because of the extensive number of gated communities with private recreational facilities in Calabasas, the City Community Services Department desires to offer public recreation programming at these private facilities. It is their intent to offer the general public a variety of classes and activities within the gated communities (e.g., swimming pools, community rooms, etc.) that are not currently available or widely available at the public parks.

PARK STANDARDS

The National Recreation and Parks Association utilizes a neighborhood park standard of 4.0 acres per 1,000 population. According to estimates taken from the U.S. Census data, the total 1990 population in the City of Calabasas was approximately 21,000 persons. By applying the 4.0 acres per 1,000 population County/National Recreation Parks Association standard to the City of Calabasas, the total park need for the community would be 74 acres. Consequently, without allowing credit for private park and recreation facilities, and Santa Monica Mountains and preserves, there is a significant shortage of local park facilities.

RECREATION PROGRAMS

The City of Calabasas recently established a Community Services Department to provide recreation services. In addition, a Parks and Recreation Commission has been appointed in the near future to interpret policy and recommend decisions on park/recreation services to the City Council.

The City provides recreation and community services programs during four program seasons throughout the year. These programs consists of a variety of recreational programs and classes for all age groups. Currently, the Community Services Department operates 35-40 classes and activities, including 17 adult classes. To serve these programs, school district facilities are used for most activities, with Gates Canyon Park, Homeowner Association Clubhouses, and the City Hall conference rooms providing additional space.

For the summer of 1992, the City of Calabasas contracted with the City of Agoura hills to provide recreation services for the City's pre-school aged children, youth, teenagers, and adults. Various facilities in the area were utilized, including County parks, YMCA, and schools, to administer this program. The program did not include services for senior citizens. Because of the staff shortages in Agoura Hills, it is unlikely that the City will contract again with Agoura Hills; instead, this program will be provided by the Calabasas Community Services Department.

The City of Calabasas also instituted a beach bus program for the residents during summer, 1992. The program was directed primarily towards teenagers, but was open for all residents desiring bus access to the beach.

TRAILS

The National Park Service, and the Santa Monica Trails Council together with a variety of other local public agencies and private concerns, is planning an integrated trail system (i.e., integrates with other local and regional trail networks) that links area recreation facilities and provides trail corridors between the mountains and the coast. The system will include trails of varying lengths and degrees of difficulty for a wide range of people with a variety of skills and abilities, including the disabled, senior citizens, and families. A series of loop

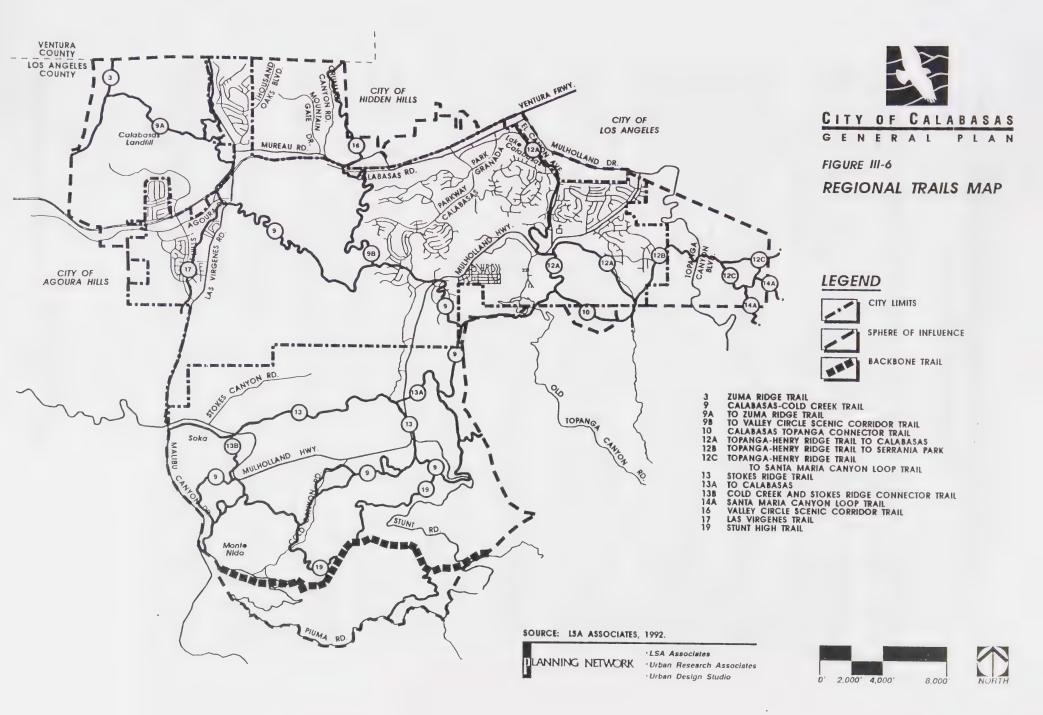
trails will be provided for day hikers, and overnight camps will be established along longer trails to allow uninterrupted backpacking trips of several days' duration. The trail system may eventually connect with other major trails in the region, such as the Rim of the Valley Trail and the Pacific Crest Trail.

Two kinds of trails providing two types of experiences will be developed -- recreation tails and expedition trails. Recreation trails will be accessible from residential developments, activity sites, and major roads that can support trailhead parking. They will be relatively short and permit hikes or horseback rides lasting an hour to a day. They will provide relatively easy, relaxing routes, often to special features or scenic viewpoints. Some of the recreation trails will be designed for use by the elderly, the disabled, and families. some will have low grades, hard-packed surfaces, benches, and water fountains. Jogging is another use that may be made of some of these trails.

Expedition trails will provide challenges for more experienced hikers and equestrians. They will require more strenuous activity, will often take more than a day to complete, and may require specialized equipment for backpacking. Expedition trails will offer greater solitude and a means of "getting away" from the more intensively used areas in the mountains. Design standards may also vary, with expedition trails narrower than recreation trails.

The primary trail in the Santa Monica Mountains system is referred to as the "Backbone Trail" which extends in an east-west direction to the south of Calabasas' corporate limits within the General Plan study area. Figure III-6 illustrates the trails planned in the General Plan study area. The 55-mile long backbone trail connects Topanga State Park, Tapia County Park, Malibu Creek State Park and Zuma Canyon County Park. It is used both by hikers and equestrians and provides views of the Pacific Ocean and the rugged Santa Monica Mountains.

A number of other trails connect with the Backbone Trail or other major feeder trails, linking together numerous significant landforms and regions, including the beaches along the Malibu coast. These include the Las Virgenes Trail, the Valley Circle Scenic Corridor Trail, the Calabasas/Cold Creek Trail, the Topanga/Henry Ridge Trail, the Stoke's Ridge Trail, Zuma Ridge Trail, Malibu Creek Trail, Saddle Peak Trail, Tuna Canyon Trail, Santa Maria Canyon Trail, Camp Slausen Connector Trail and the Stunt High Trail. These trails are illustrated in Figure III-6, Regional Trails Map, except for the Malibu Creek Trail, Saddle Peak Trail, Tuna Canyon Trail, and Camp Slausen Connector Trails, which are not located within the study area.



The status of the trails in the study area is described below. Note that the numbering scheme corresponds to Figure III-6.

- 3- Zuma Ridge Trail This trail is complete and easements are in place. This trail is a main north-south cross mountain trail that intersects with the Backbone Trail and five lateral trails. The trail connects Zuma Beach, and the Calabasas Landfill, which is to be the site of a future regional park, and traverses the Zuma Canyon Ecological Area.
- 9 Calabasas-Cold Creek Trail None of the northern segment has been constructed; some of the southern segments are in place. Easements have been granted through the Baldwin and Denivits properties. This trail would start at Tapia Park, connecting the Backbone Trail, passing along the ridge at the western end of McCoy Canyon and ending in Cheseboro Canyon where it intersects with the Zuma Ridge Regional Trail. Along this route the trail would traverse the Cold Creek watershed, the Palo Comado Ecological Area, Calabasas Peak and other scenic geologic formations. Near the Ventura Freeway the trail could possibly fork with one of its end points at Calabasas Road to provide an access point.
- 9A To Zuma Ridge Trail This trail is not constructed and easements are not in place. When completed, it will connect to the Zuma Ridge Trail located in the northwestern portion of the study area.
- 98 To Valley Circle Scenic Corridor Trail This trail is not constructed, but most of the easements have been obtained. This trail would connect the Calabasas-Cold Creek Trail to the Valley Circle Scenic Corridor Trail in the north.
- 10 Caiabasas Topanga Connector Trail This trail exists, but easements are not in place. It connects the Calabasas/Cold Creek Trail with the Topanga Cross-Mountain Regional Trail and provides many panoramic views along its path.
- 12A Topanga-Henry Ridge Trail to Calabasas Portions of the trail have been constructed; some easements have been obtained. This trail begins at the Calabasas Topanga Connector Trail and travels north through the incorporated Calabasas study area.
- 12B- Topanga-Henry Ridge Trail to Serrania Park Portions of the trail have been constructed; some easements have been obtained. This trail links the Calabasas Topanga Connector Trail to the Topanga-Henry Ridge Trail (to Serrania Park).
- 12C Topanga-Henry Ridge Trail to Santa Maria Canyon Loop Trail Most of the trail has been constructed; easements are not in place. This trail links the Topanga-Henry Ridge Trail (to Serrania Park) and the Santa Maria Canyon Loop Trail.
- 13 Stokes Ridge Trail This trail exists and most of the easements are in place. This trail runs from Malibu Creek State Park north of Mulholland Highway, rimming the northern edge of Cold Creek Watershed, ending at Calabasas Peak, and intersecting the Calabasas/Cold Creek Trail.

- 13A To Calabasas Some of this trail has been constructed and easements have been obtained on portions of the alignment. This trail links Calabasas-Cold Creek Trail to the Stokes Ridge trail in the southeastern portion of the study area.
- 13B Cold Creek and Stokes Ridge Connector Trail This trail exists and the easements are in place. This trail also links the Calabasas-Cold Creek Trail to the Stokes Ridge trail, only in the southwestern portion of the study area.
- 14A Santa Maria Canyon Loop Trail The trail exists but easements have not been obtained. This trail connects to the Topanga-Henry Ridge Trail in the northeastern portion of the study area, and loops around Santa Maria Canyon.
- 16 Valley Circle Scenic Corridor Trail None of the trail has been constructed; easements have been obtained through the Baldwin property. This trail would run northward from its connection with the Calabasas/Cold Creek Trail into Ventura County and a portion of the City of Los Angeles.
- 17 Las Virgenes Trail None of the trail has been constructed; most of the easements have been obtained south of the Ventura Freeway. This trail would run northward from Malibu Creek State Park along Las Virgenes Creek, intersecting and following for a short distance the Calabasas/Cold Creek Trail, then continuing north into Las Virgenes Canyon.
- 19 Stunt High Trail None of the trail has been constructed and none of the easements have been obtained. This trail would link the Backbone Trail with two sections of the Calabasas/Cold Creek Trail in traversing portions of the Cold Creek Trail, and traversing portions of the Cold Creek SEA and its buffer.

Potential Future Trails

The following trails are either still in the planning stages, or are not currently part of the extensive Santa Monica Mountains trails system.

The County has recently pursued designation of a trail that is not on their Master Plan of Trails, outside of Calabasas city limits but within the General Plan study area. This unnamed trail is located on the Chateau Calabasas project and would connect Calabasas highlands with the County's trail system. The County required the developer to dedicate this trail because of strong support from the community.

Although the route has not been precisely defined, the Juan Bautista DeAnza National Historic Trail, designated by Congress in 1990, probably comes through Calabasas and crosses the Ventura Freeway at the Valley Circle Interchange. When DeAnza's party came through in 1776, they travelled approximately along the 101 corridor, camping at Las Virgenes Creek on February 22, 1776. The DeAnza party probably came past the Leonis Adobe site, and the open space dedication in Calabasas Park is apparently very near his actual route.

The Valley Circle Interchange of the 101 Freeway is proposed for reconstruction and will include an equestrian sidewalk over the bridge to connect the cities of Los Angeles and Hidden Hills with the Santa Monica Mountains. This connection will occur by way of the Topanga-Henry Ridge Trail that passes through Calabasas. Los Angeles City's Canoga Park-Winnetka-Woodland Hills District plan (October 1984) shows an equestrian trail crossing the Ventura Freeway by the Valley Circle Interchange.

Public trails originating from the Ahmanson Ranch could provide a regional north-south trail connection if that development proceeds. Ahmanson Ranch would be connected to the Santa Monica Mountains, as well as to Los Angeles by the County's Valley Circle Scenic Corridor Trail, which would extend through Ahmanson Ranch and continue into the northern San Fernando Valley along Valley Circle Boulevard and tie into the trail system already established in the north valley.

Las Virgenes Canyon trail is another proposed County trail that connects Ahmanson Ranch to the Santa Monica Mountains. The County has obtained several easements for this trail, adequate to build the trail from the Ventura Freeway to Malibu Creek State Park. One of these easements requires a realignment. Easements north of the Ventura Freeway have not yet been obtained. The Ahmanson Ranch has also agreed to provide large staging areas on property at Las Virgenes Road. Equestrian trail users also utilize an unofficial parking area within the right-of-way of Mulholland Highway at the Calabasas-Cold Creek Trail crossing.

E. PUBLIC SAFETY SERVICES

FIRE/EMERGENCY/PARAMEDIC SERVICES

The Los Angeles County Fire Department, as part of the larger Consolidated Fire Protection District of Los Angeles, provides contract fire protection and paramedic services to the City of Calabasas through three stations located in the Calabasas study area (see Figure III-7). The Los Angeles County Fire District serves a total of 893 square miles of developed and unincorporated County area, and 50 municipalities. Any location served by the Fire District has access to the complete resources available within the District. The District is comprised of 128 fire stations, 144 engine companies, five helicopters and various surface equipment (bulldozers) providing fire fighting capabilities.

Fire Station No. 68 currently provides the majority of services to the Calabasas community with Station No. 125 providing overlapping services. Information on the stations with regard to staffing is provided below. The locations of the fire stations are indicated on Figure III-6.

Fire Station No. 67 located at 25801 Piuma Road, serves the southern portion of the study area. Three to four firefighters per day in 24-hour shifts and one engine serve at this station.

Fire Station No. 68 located at 24130 Calabasas Road, serves the eastern portion of the study area. Four to five firefighters per day in 24-hour shifts serve at this station, using one main engine, one reserve engine, and a patrol engine. The reserve engine is used while the main engine is being serviced, or in the event that an additional engine is required for a fire.

Fire Station No. 125 located at 5215 Las Virgenes Road, serves the western portion of the study area. Six firefighters per day and two paramedic firefighters per day in 24-hour shifts serve at this station, along with one main engine, a truck, and a paramedic van.

The Fire District receives funding from two sources. The first is from the property tax base which provides the District with \$0.17 per tax dollar. The second source is from developer fees. The current fees are assessed at \$0.1937 per square foot of development regardless of land use. However, these fees change from year to year. Development fees are collected in conjunction with the issuance of building permits and are intended to offset the impact of providing fire protection services to new development, and adding to the Malibu areas network of fire fighting capabilities. This consists of a network of 11 fire stations (Battalion 5) serving the five incorporated cities and unincorporated County lands along the Ventura Freeway corridor to the Malibu Coast. With this network, the City of Calabasas is afforded regional fire protection, irrespective of city limits. Fire Station No. 67 is also funded, in part, by the Malibu State Park.

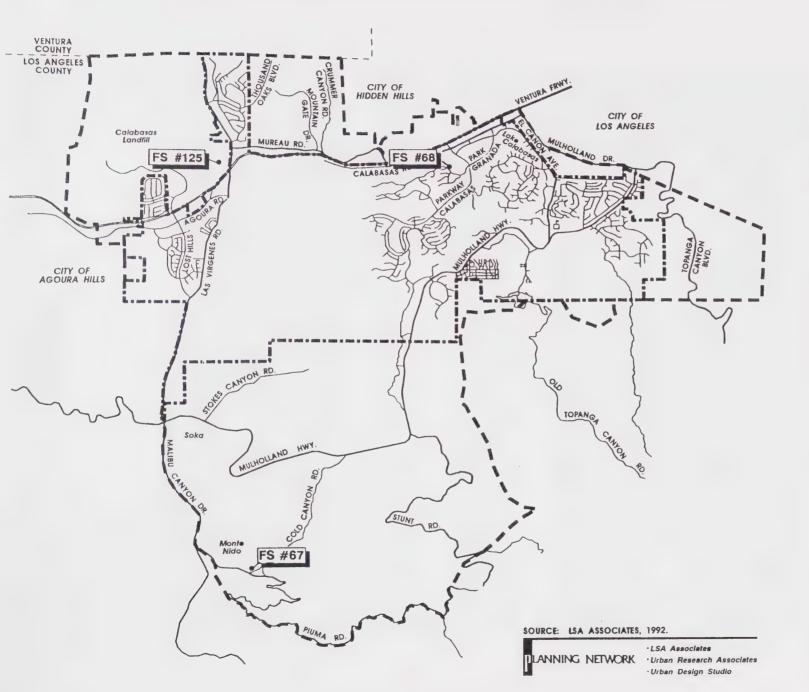




FIGURE III-7

FIRE STATIONS

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE









The Fire District is responsible for providing all fire suppression services to the City of Calabasas, as well as for the surrounding unincorporated lands, including the General Plan study area. These services include both structural fires and wildland fires. Other sources are available as necessary under various mutual aid agreements to provide fire fighting assistance. These include the California Department of Forestry and the United States Forest Service. Both agencies normally provide fire suppression services for State and federal lands, respectively. However, neither agency maintains fire fighting crews in the region for this purpose, and would be required to import crews and equipment to provide this assistance. The Fire District also utilizes 30 inmate crews to provide wildland fire suppression services.

Should the Calabasas area require additional fire fighting capabilities, the other existing fire stations serving the Malibu area network (described above) would provide the first tier of defense. Additional service can also be summoned from the City of Los Angeles and from Ventura County through mutual aid agreements.

The County of Los Angeles Fire Department regulates access to all buildings (residential, commercial, industrial) through Fire Code Standard No. 10.207 (A) and (B). The intent of the code is to maintain an adequate level of fire protection for buildings constructed within their jurisdictional area by ensuring that access roads adequately support fire department apparatus. The fire code specifies provisions that address road surface materials for private access roads with grades over 10 percent, weight requirements, minimum width standards (generally 20 feet for single family residential and 26 feet for high density residential, commercial/industrial), fire hydrant spacing, length of private access roads, grades for private access roads, curve radii, drainage control, etc. The circumstances vary significantly with respect to the application of the standards due to differences in development design.

Minimum fire flow requirements vary considerably according to many factors. These factors include type of land use and building construction, occupancy conditions, etc.

Currently, no new fire facilities are planned that would directly benefit the Calabasas community. However, a fire station is being considered at some future date to serve the Liberty Canyon area, and a fire station is planned for the Ahmanson Ranch project in Ventura County. The Fire District meets with the City representatives annually to address fire prevention and protection deficiencies and needs.

POLICE/SHERIFF SERVICES

City police protection services are provided through a formal contract with the Los Angeles County Sheriff's Department. Sheriff services are dispatched from the new Lost Hills Sheriff's Station, located at 27050 Agoura Road. This station provides protection services for 190 square miles of Los Angeles County from the western border of the City of Los Angeles to the Ventura County line, and north from the Pacific Ocean to the southern border of Ventura County (or northern corporate limits of Calabasas).

The Lost Hills Sheriff's Station has an existing manpower level of 120 sworn personnel from the rank of deputy through captain. They currently operate approximately 44 vehicles, served by one two-man patrol car in the early evening and morning hours, and one one-man car during daytime hours and four one-man vehicles for traffic control. The primary law enforcement concerns are traffic control, burglary, automobile burglary and theft, and domestic disputes.

In addition to the services outlined above, the City of Calabasas contracts for supplemental police services, sharing these services with adjacent communities. Calabasas contributes 40 percent of the costs for: a two-man juvenile intervention team and vehicle; a community relations officer; and an agendized car for directed patrol (e.g., special projects; not on call).

According to the Sheriff's Department, police protection services are contracted according to the need established by the City of Calabasas. In principle, the service level is not established by a particular standard, but is based on the City's need for service. The current service level is considered adequate by the Sheriff's Department.

The number of major crimes that occurred in 1991 investigated from the Lost Hills Station totalled 153 and are as follows: Burglary (36); Homicide (0); Rape (0); Robbery (5); Aggravated Assault (33); Theft (53); Grand Theft Auto (25); Arson (1). These figures reflect the most recently compiled data on crime from the Lost Hills Station.

The Malibu Sheriff's Station, which formerly provided primary law enforcement services, now provides only counter services for report filings. Police protection services are no longer provided out of the Malibu Sheriff's Station.

Although the Sheriff's Department does not maintain separate statistics for gated versus non-gated communities, they believe that approximately 70 percent of their responses occur in non-gated communities, and 30 percent in gated communities. It should also be noted that approximately 50 percent of the responses to gated communities are for burglary, with a significant number of those attributed to false alarms.

According to the Sheriff's Department, because of the city layout, access to various parts of community is constrained by major roadway limitations. Specifically, the Ventura Freeway divides the city into a north and south portions. This creates a potential access concern (i.e., as needed to provide adequate police protection services) should the Ventura Freeway be closed, such as could occur during a hazardous materials accident/spill. In this event, motorists would be required to exit the freeway and utilize Mureau Road to get from the east to the west and vice versa. Mureau Road is not adequate in capacity or width to carry the freeway burden, would be significantly congested to the point of limiting police access. The options for improving this condition are to widen Mureau Road, and/or to extend Parkway Calabasas to Las Virgenes Road.

In disaster or emergency situations, the Sheriff's Department would establish an Emergency Operations Center at the Lost Hills Station for the purposes of centralizing all responses. All available deputies would be mobilized and placed on twelve hour on and off shifts. When the emergency is declared over, the deputies would resume their regular shift routines.

The Emergency Operations Center would first examine critical sites (i.e., hospitals, dams, etc.) to determine the significance of the event on the facility. Once the critical sites are examined, the Center would prioritize remaining emergency responses for significance. The Center would also coordinate response efforts with the Fire Department and the downtown Sheriff's office (headquarters) for additional assistance. If needed, other emergency agencies would be contacted to respond to specific areas of jurisdiction (e.g., California Highway Patrol for state highway facilities). For information regarding the City's Emergency Preparedness Committee, please refer to Section V-E, Disaster Response.



ENVIRONMENTAL RESOURCES



IV. ENVIRONMENTAL RESOURCES

Environmental Resources section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Open Space and Conservation Elements. It also presents the background information necessary to comply with the provisions of the Southern California Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) requirements that local agencies address air quality issues.

The Environmental Resources chapter includes the following major sections.

- Hillsides, Canyons, and Ridgelines
- Air Quality
- Biotic Resources
- Water Resources
- Mineral Resources

A. HILLSIDE, CANYON, AND RIDGELINE MANAGEMENT

The topographical conditions in the Calabasas General Plan study area are varied, consisting of differential hillside terrain with numerous valley and arroyo conditions. Flat or level topography constitutes a small percentage of the terrain within the study area.

The highest elevation within the study area is approximately 2,800 feet. It is located in the most southerly portion of the Calabasas General Plan study area, adjacent to Saddle Peak Road. The lowest elevation, approximately 500 feet in elevation, occurs in the southwestern portion of the study area at Las Virgenes Road/Mulholland Canyon Road and the Monte Nido community.

The unique valleys and arroyos that characterize the study area include Topanga Canyon, Cold Canyon, McCoy Canyon, Crummer Canyon, Gates Canyon, Las Virgenes Canyon, Stokes Canyon, Malibu Canyon, and Dark Canyon. Prominent peaks within the study include Saddle Peak and Calabasas Peak. The Calabasas General Plan study area also contains several significant ridgelines, which are indicated on Figure II-4, Scenic Features, in Section II, Community Development and Design.

As mentioned above, the Calabasas study area contains numerous unique physical resources including a variety of ridgelines, hillsides, canyons, and rolling hills. The presence of numerous park and recreation resources established as a result of the community's unique physical resources is an affirmation of the potential resources that remain in Calabasas. Further discussion of topographic and landform features as they relate to scenic beauty and aesthetics in Calabasas may be found in Section II-D, Community Design.

B. AIR QUALITY

CLIMATE AND WINDS

Southern California's climate comes from the interaction of meteorological influences with the area's topography. Most important of all meteorological influences, judged by the effects produced on ambient air pollutant concentration, is the Pacific High, a semi-permanent region of high atmospheric pressure centered over the eastern Pacific ocean. During the late spring, summer, and early fall, descending warm air from the Pacific High blankets a cooler layer of air closer to the ground. This stable temperature inversion inhibits the vertical dispersion of air pollutants. Coupled with abundant sunshine and light surface winds, both common during the summer months, the increased quantities of photo chemically produced air pollutants are not readily dispersed. This causes the region's most serious air quality problems.

The City is located at the western end of the San Fernando Valley, the northwestern boundary of the South Coast Air Basin (hereafter referred to as the "basin"), and is considered a route for air exchange between the coastal and inland valley areas. In the absence of large-scale influences, a daily sea breeze/drainage flow -- characterized by afternoon breezes flowing from sea to land followed by late evening/early morning breezes from land to sea -- dominates local winds. The afternoon winds, generally strongest during the summer, flow north, and can reach average speeds of 8 to 12 miles per hour. The late evening/early morning winds flow south. These drainage winds are strongest in the winter season and generally average five miles per hour.

Recorded air temperatures (in degrees Fahrenheit) in the City range from the high 50's to high 90's in the summer and from the low 40's to the high 60's in the winter. Peak hourly temperatures greater than 100 have been recorded during the late summer; and minimum hourly temperatures below 30 have been recorded during the winter. Mean annual precipitation in the City is approximately 13.6 inches, with over 90 percent of this rainfall occurring between November and March, inclusively. Annual precipitation can range from less than one third of the mean value to almost twice as much (Calabasas Park West Project, October, 1990).

AIR POLLUTANTS AND AIR QUALITY STANDARDS

The Federal Clean Air Act (as amended in 1990) sets forth national ambient air quality standards, while the California Air Resources Board establishes State air quality standards. These standards are the maximum ambient levels permissible for each air pollutant so as not to adversely affect public health or welfare (see Table IV-1).

The purpose of the federal and State primary standards is to provide sufficient protection, with a margin of safety, from certain identified adverse health effects (see Table IV-2).

Currently, federal and State standards for ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are often exceeded in the Basin and, thus, the Basin is considered a non-attainment area for these pollutants.

Table IV-1
Air Quality Standards
Calabasas General Plan Study Area
1992

Pollutant	Averaging Time	Federal Standard	California Standard
Ozone	1-hour	0.12 ppm ¹	0.09 ppm
Carbon Monoxide (CO)	1-hour 8-hour	35.0 ppm 9.0 ppm	20.0 ppm 9.0 ppm
Nitrogen Dioxide (NO ₂)	1-hour annual	0.05 ppm	0.25 ppm
Sulphur Dioxide (SO ₂)	1-hour 24-hour annual	0.14 ppm 0.03 ppm	0.5 ppm 0.05 ppm
PM ₁₀	24-hour annual	150 ug/m³ ² 50 ug/m³	50 ug/m³ 30 ug/m³

Source: Air Resources Board Fact Sheet 39, November, 1991.

Table IV-2
Health Effects of Air Pollutants

Air Pollutant	Source	Health Effects
Carbon Monoxide (CO)	Incomplete fuel combustion	Interference with normal oxygen transfer to the blood; oxygen deprivation
Ozone	Photochemical reaction between other pollutants	General respiratory irritation and discomfort
Nitrogen Oxides (NO _x)	Combustion	Respiratory irritation
Sulfur Dioxide (SO ₂)	Combustion of fuels containing sulfur	Upper respiratory irritation; lung tissue injury
Suspended Particulates, (including PM ₁₀)	Industrial, transportation, agricultural, construction activities	Adverse effects on respiratory system

Source: Air Quality and Urban Development, November, 1985.

ppm = parts per million,

² ug/m³ = micrograms per cubic meter.

CURRENT AIR QUALITY CONDITIONS IN THE BASIN

Regional

Unlike many air pollutants, ozone is not emitted directly into the atmosphere, but is produced in the atmosphere by a complex series of photochemical reactions involving reactive organic compounds and nitrogen oxides (NO $_{\rm x}$). No single source accounts for most reactive organic gases and NO $_{\rm x}$ emissions; the many sources are spread throughout the basin. The basin's intense heat and sunlight during the summer months are ideal for formation of ozone. While the basin's peak ozone levels are usually measured at stations near the foot of the San Gabriel Mountains, violations of ozone standards are frequent and widespread throughout the interior portions of the basin.

In contrast to ozone, carbon monoxide (CO) distribution is more localized within the basin, caused primarily by CO from motor vehicles. Ambient CO distributions closely follow spatial and temporal distributions of vehicular traffic, and are strongly influenced by meteorological factors. CO standards are frequently exceeded in those parts of the basin subject to a combination of high traffic density and susceptibility to occurrence of surface based radiation inversions during the winter months.

Suspended particulate matter is a blanket term for a composite of natural and man-made materials, including soil, biological materials, sulfates, nitrates, organic compounds, and lead. Particulates of all sizes, and of diameters smaller than ten microns, termed PM₁₀, attain their highest ambient concentrations well downwind (eastward) of the most densely populated portions of the basin.

The major sources of NO_x are vehicular, residential, and commercial fuel combustion. These compounds also have an important role in the formation of ozone. NO_2 is the most abundant form of ambient NO_x . About one-fifth of the basin, primarily coastal and central Los Angeles County and northern Orange County, is subject to violations of the NO_2 standard.

The use of high sulfur fuels for activities such as electricity generation, petroleum refining, and industrial processes are the major sources of ambient sulfur dioxide (SO_2) . The SO_2 standard is currently being met throughout the basin.

Local Point Sources

The City is located in Source/Receptor Area No. 6 for which ambient air quality is monitored at the South Coast Air Quality Management District (SCAQMD) Monitoring Station in Reseda. Indications of pollutant levels in the City can be obtained from data collected at this station. The most recent three year summary of monitoring data from this station confirms the general severity of ozone and CO problems within the basin (see Table IV-3).

As illustrated in Table IV-3, the federal and State standards for ozone and carbon monoxide (eight hour) have been exceeded numerous times at this station over the past three years.

However, the data demonstrates that air quality is generally improving at this station, and presumably this trend continues in Calabasas. Due to the daily northern sea breeze wind condition described above, it is anticipated that the ambient ozone levels in the City would be lower than those monitored at the Reseda station, which is upwind of the City. In the summertime, these afternoon breezes would carry hydrocarbon and NO_x emissions generated in the south to the northern (inland) portion of the basin, where stagnation occurs and ozone is formed. Ambient concentrations of CO, however, may be different than those monitored at the Reseda station. Since CO is a localized pollutant, areas of the City where traffic volumes are substantial and wind dispersion is minimal (i.e., canyons), there is the potential for violations of the federal and State CO standards.

Toxic Air Contaminants

As a result of the Air Toxics "Hot Spot" Information and Assessment Act of 1987 (AB2588), the SCAQMD is responsible for identifying potential stationary source emitters of toxic air contaminants within the basin and determining the potential of each facility to harm public health. According to their most recent Air Toxics "Hot Spots" Priority Category List, dated February, 1993, there are no known stationary sources within the City that are considered potential emitters of toxic air contaminants.

Table IV-3
Air Pollutant Data Summary
from the Reseda Monitoring Station (1989-1991)

Pollutant	1989	1990	1991	State Standard	Federal Standard
Ozone					
Highest 1-hour Measurement	0.23	0.19	0.22	0.12 ppm ¹	0.09 ppm
No. of Days exceeding Federal Standard	54	41	53		
No. of Days exceeding State Standard	120	108	100		
Carbon Monoxide					
Highest 1-hour Measurement	17.0	19.0	16.0	20.0 ppm	35.0 ppm
No. of Days exceeding Federal Standard (1 hour)	0	0	0		
No. of Days exceeding State Standard (1 hour)	0	0	0		
Highest 8-hour Measurement	12.5	14.9	13.5	9.1 ppm	9.5 ppm
No. of Days exceeding Federal and State Standards (8 hour)	15	_11	8		
Nitrogen Dioxide					
Highest 1-hour Measurement	0.18	0.19	0.17	0.25 ppm	
No. of Days exceeding State Standard	0	0	0		
Sulfur Dioxide					
Highest 24-hour Measurement	.02	.02	NM ³	0.05 ppm	0.14 ppm
No. of Days exceeding State Standard	0	0	NM		

Table IV-3
Air Pollutant Data Summary
from the Reseda Monitoring Station (1989-1991)

Pollutant	1989	1990	1991	Standard	Standard
Particulates (PM ₁₀)					
Highest 24-hour Measurement	NM	NM	NM	50 ug/m ^{3 2}	
No. of Days exceeding State Standard	NM	NM	NM		
Annual Average	NM	NM	NM		
Years exceeding State Standard	NM	NM	NM		

Source: South Coast Air Quality Management District Monitoring Data, 1989-1991.

Sensitive Receptors

Sensitive receptors in the Calabasas area include land uses that contain segments of the population (i.e., young children, the elderly and persons subject to respiratory complications) that are more susceptible to the effects from local or regional air pollutants than the general populace. These land uses include schools (particularly preschools/nursery schools), convalescent facilities, senior housing projects, and hospitals. The study area does not contain any preschools/nursery schools. Thus, sensitive receptors in the study area consist of schools (see Section III-C), the Woodview Calabasas Hospital, and the Motion Picture and Television Fund facility.

REGULATORY BACKGROUND

The following discussion identifies the federal and State legislation that has been enacted to mandate reductions in air pollutant emissions within the basin. Implementation of these mandates by the SCAQMD and Southern California Association Governments is discussed following the regulatory framework. Finally, a discussion of the City's responsibility for implementing these requirements is provided.

ppm = parts per million

² ug/m³ = micrograms per cubic meter

NM = Pollutant not measured at this station.

Federal

The federal Clean Air Act, as amended in 1990, divides the nation into five categories of planning regions ranging from marginal to extreme. The act also specifies new strategies for attaining federal air quality standards in each category, depending upon the severity of their pollution. New strategies include mandatory annual reductions in air pollutant emissions, progressively more stringent requirements for new stationary air pollutant sources, scheduled introduction of low emitting cars and trucks into the motor vehicle fleet, stringent new tailpipe emission standards for motor vehicles, and development of alternatives to the private automobile as the primary means of transportation. The Clean Air Act has designated the basin as "extreme" for ozone, and requires attainment of the federal ozone standard by 2010. The basin is designated as "serious" for CO, and is required to attain the federal CO standard by 2000. It is also designated "serious" for PM10, and attainment of the Federal standard is required by 2001. SCAG has been designated as the Metropolitan Planning Agency responsible for ensuring basin compliance with the Clean Air Act.

New federal regulations for development projects designed to implement the 1990 Clean Air Act Amendments are currently in preparation at the U.S. Environmental Protection Agency. However, no schedule has been established for the release of these regulations at this time.

Federal Attainment Plan for Carbon Monoxide

In response to the requirements of the Clean Air Act Amendments of 1990, SCAQMD developed an attainment plan for achieving federal carbon monoxide standards. According to the Act, nonattainment areas for carbon monoxide are required to submit an attainment plan by November 15, 1992, which identified attainment of the standard by December 31, 2000.

On November 3, 1992, SCAQMD adopted a Federal Attainment Plan for Carbon Monoxide which identified attainment of the federal standards by 2000. Emissions reduction identified in this Plan are derived from control measures outlined in the 1991 Air Quality Management Plan (discussed below). These control measures are targeted at on and off road sources and transportation/land use sources. However, not all CO control measures identified in the Air Quality Management Plan were needed to demonstrate attainment. These control measures are presented as possible contingency and/or back stop measures.

The federal Attainment Plan has been forwarded to the United States Environmental Protection Agency for their review and approval. Initially, the EPA has determined that the majority of the Plan submittal was complete, however, the contingency measures component of the Plan was deemed incomplete due to the lack of regulatory implementation framework for these measures. Beginning January 15, 1993, the basin is under the 18 month sanction clock and 24 month Federal Implementation Plan clock for failing to provide a complete submittal by November 15, 1992. This means that SCAQMD has 18 months to submit the regulatory framework for the contingency measures to the EPA for acceptance. Also, since SCAQMD did not meet the deadline set in the Act, approval of an attainment plan must be completed within 24 months or the EPA must

begin preparation of a Federal Implementation Plan (described below) which identifies mandates for attainment of the federal carbon monoxide standards. A City can demonstrate compliance with the CO Attainment Plan by demonstrating compliance with the 1991 Air Quality Management Plan (AQMP, described in a following section), which will be incorporated into the Federal Implementation Plan.

Currently, SCAQMD is coordinating with local agencies and districts to identify a regulatory framework for implementation of the contingency measures outlined in the CO Attainment Plan. This effort is expected to be completed by January, 1994.

Federal Implementation Plan

The basin has the worst air quality in the nation and has failed to meet the attainment schedules set up in the federal Clean Air Act, as amended. State Implementation Plans to demonstrate attainment of the federal ozone and carbon monoxide standards were developed in 1972, 1979, and 1982. The EPA has disapproved each of these State Implementation Plans and determined that they were inadequate, however, the EPA has never adopted a Federal Implementation Plan, which is a statutory obligation of the Act when a nonattainment area does not provide an adequate attainment plan.

In 1988, the Coalition for Clean Air and the Sierra Club filed a lawsuit to force the EPA to publish a Federal Implementation Plan for the basin, as required under the Act. In March, 1989, the EPA entered into a settlement agreement with the plaintiffs which obligated them to prepare and publish a Federal Implementation Plan for the Basin.

On November, 1991, the EPA filed a motion with the United States District Court asking it to vacate the settlement agreement and dismiss the case on the basis of the adoption of the federal Clean Air Act Amendments of 1990. The District Court granted the EPA's request and vacated the settlement agreement and dismissed the case. Coalition for Clean Air and the Sierra Club appealed the District Court's decision to the United States Supreme Court.

In February, 1993, the United States Supreme Court reversed the decision of the District Court and the case was remanded to the lower courts for reinstatement of the settlement agreement. As part of the reinstatement of the settlement agreement, the District Court is instructed to establish an expeditious schedule for publication of a final Federal Implementation Plan for ozone and carbon monoxide attainment in the basin. Currently, the SCAQMD, California Air Resources Board, EPA, and the plaintiffs of the case are cooperating in development of the schedule required under the Supreme Court decision. At this time, it is anticipated that the Federal Implementation Plans for ozone and carbon monoxide attainment will incorporate the control measures identified in the 1991 Air Quality Management Plan and the 1992 Federal Attainment Plan for Carbon Monoxide, both developed by the SCAQMD, the SCAG. Thus, Calabasas, by implementing the CO Attainment Plan and the 1991 AQMP will be in conformance with the Federal Implementation Plan.

State

Senate Bill 51, signed into law in 1987, gave the SCAQMD significant new powers designed to improve air quality in the basin. The law instructs SCAQMD to develop new transportation control measures and rules for indirect sources (i.e., facilities that attract a large number of vehicles). SCAQMD has initiated the preparation of an indirect source rule in response to the law. However, this rule has not been completed and has been removed from the rule making calendar, resulting in uncertain adoption of the rule. This rule, when effective, will likely impose controls on major trip attractors, such as regional malls, sports arenas, etc. Until a rule has been enacted by SCAQMD that regulates indirect sources, the primary responsibility rests with the local jurisdiction (i.e., Calabasas), who has the authority to impose restrictions according to local need. SCAQMD is also required to develop further programs and regulations that will increase ride sharing and limit heavy-duty truck traffic on freeways during rush hours.

SCAQMD is provided the authority through Senate Bill 51 to develop further programs and regulations that will increase ride sharing and limit heavy-duty truck traffic on freeways during rush hours. In response, SCAQMD has developed control measures in the 1991 Air Quality Management Plan (see Table IV-4), such as; M-H-5 Enhanced Regulation XV, M-H-2 Trip Reduction for Schools, 1a Persons Work Trip Reduction, 2a Employer Rideshare Incentives, M-H-6 Truck Programs and 3a Truck Dispatching, Rescheduling and Rerouting to implement this authority.

The California Clean Air Act of 1988 requires all air districts in the State to endeavor to achieve and maintain State ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide by the earliest practicable date. California's ambient air standards are generally stricter than national standards for the same pollutants.

Based on pollutant levels, the California Clean Air Act divides non-attainment areas into three categories (moderate, serious, and severe) to which progressively more stringent requirements apply. The Basin is classified as a "severe" non-attainment area for ozone, carbon monoxide, and nitrogen dioxide, which means that it is not expected to attain and maintain the applicable State standards until December 31, 1997, or later. "Severe" non-attainment areas are required to revise their air quality management plans to include specified emission reduction strategies and to meet milestones in implementing emission controls and achieving more healthful air quality. The new control requirements outlined below have been incorporated into the 1991 AQMP. By demonstrating compliance with the AQMP, Calabasas will have incorporated many of the bulleted items listed below. Because the AQMP is designed to be in conformance with the State Clean Air Act, the City will be thus in compliance with this act.

For "severe" non-attainment areas, the new control requirements also include:

- an indirect and area source control program,
- best available retrofit control technology for existing stationary sources,

- a program to mitigate all emissions from new and modified permitted sources,
- transportation control measures (see list in Table IV-4) necessary to attain a 1.5 average passenger vehicle ridership during weekday commute hours, and
- significant use of low emission vehicles by fleet vehicles.

The California Clean Air Act also includes several additional goals and requirements, including reducing district wide emissions, vehicular trips and vehicle miles traveled, as well as ranking control measures by priority and cost effectiveness, no net increase in vehicle emissions after 1997, and a reduction in overall population exposure to ambient pollutant levels in excess of the applicable standards by at least 50 percent of 1986-88 levels by December 31, 2000.

The California Clean Air Act specifies that plans for attaining California standards were to be submitted to the California Air Resources Board by June 30, 1991, and that districts were to focus particular attention on reducing the emissions from transportation and area-wide emissions sources. The Act provides air districts with new authority to regulate indirect sources. As previously stated, a rule to control the indirect sources has been initiated by SCAQMD but has been removed from the District's rulemaking calendar, therefore the adoption schedule for an indirect source rule is unknown. Each district plan is to achieve a five percent annual reduction, averaged over consecutive three year periods, in district wide emissions of each non-attainment pollutant or its precursors unless, despite the inclusion of all feasible measures in the plan and an expeditious adoption schedule, the area is not able to achieve the required five percent annual reduction.

1991 Air Quality Management Plan (AQMP)

The SCAQMD in coordination with SCAG has prepared the 1991 Air Quality Management Plan (AQMP), which is the current regulatory framework for attaining federal and State air quality standards in the basin. In 1991, SCAQMD and SCAG revised the AQMP for the basin to address the requirements of the California Clean Air Act. SCAG and SCAQMD adopted the AQMP on June 6, 1991, and July 12, 1991, respectively.

Upon local adoption, the AQMP was transmitted by SCAQMD to the California Air Resources Board for review and approval. The California Air Resources Board held a public hearing on October, 16, 1992, regarding adoption of the 1991 AQMP. Subsequent to closure of the public hearing, the California Air Resources Board adopted portions of the 1991 AQMP, and conditionally approved the majority of the remainder of the AQMP as adequate to meet the requirements of the California Clean Air Act. The SCAQMD and SCAG were given until July 1, 1993, to provide additional documentation requested as part of the conditional approval.

Pending this approval, the 1991 AQMP is the appropriate planning document for the determination of a project's air quality conformance with the California Clean Air Act under the California Environmental Quality Act (CEQA).

The current 1991 AQMP is a revision of the 1989 AQMP. It is designed to address the requirements of the California Clean Air Act, and identify measures to reduce toxic contaminants and global warming precursors. The 1991 AQMP is similar to the 1989 AQMP; however, the 1991 AQMP includes additional Tier I, II and III control measures, and market based incentive strategies to meet targets for emission reduction. The 1991 AQMP also includes revisions to the 1989 AQMP conformity guidelines.

The short-term, or Tier I, component of the AQMP is action oriented. Tier I measures are outlined in Table IV-4. It identifies specific control measures for which control technology presently exists. These measures consist mainly of stationary source controls that will be the subject of SCAQMD rule making, California Air Resources Board adopted motor vehicle emissions standards and fuel specifications, and federally adopted programs to reduce emissions from sources under federal jurisdiction. A city such as Calabasas is required to adopt all feasible Tier I measures, as well as provide documentation for why Tier I measures not adopted were considered to be infeasible.

Tier II measures are composed primarily of the extension or more stringent application of Tier I control measures. Emission reduction strategies for solvent reformulation and nonpolluting power generation and energy storage will require additional research and development efforts beyond those currently proposed under Tier I. The use of stricter standards, such as emission charges and growth management measures, will need to be developed to bring about the technical advancements necessary to achieve Tier II goals.

Tier III measures depend on substantial technological advancements and breakthroughs that are expected to occur throughout the next two decades. This requires an aggressive expansion of Tier II research and development efforts. After achieving Tier II goals, Tier III measures must be implemented on an accelerated schedule to achieve attainment as early as feasible.

According to the 1991 AQMP, attainment of all federal health standards is to occur no later than the year 2000 for CO and NO_x dioxide, 2005 for PM_{10} and 2010 for ozone. State standards are to be attained no later than the year 2000 for NO_x and 2010 for CO. State standards for ozone and PM_{10} are not to be achieved until after 2010. It should be noted that the State standards for ozone and PM_{10} cannot be attained with full implementation of the current AQMP, and that future AQMP revisions will need to identify additional control measures to attain these standards.

The AQMP measures exceed the emission reduction requirements of the California Clean Air Act in terms of per capita pollutant exposure, but the measures will not serve to meet the five percent per year emission reduction requirements in the California Clean Air Act. The California Clean Air Act also requires that per capita exposure to unhealthful pollutant levels be reduced by 25 percent in 1994, by 40 percent in 1997, and by 50 percent in 2000. The AQMP measures meet this second requirement for ozone, carbon monoxide and nitrogen dioxide. Thus, although the Plan does not meet the California Clean Air Act target for a five percent emissions reduction per year, the Plan achieves the California Clean Air Act alternate target of emissions reductions to the "maximum extent feasible." In order to achieve the federal and State ambient air quality standards, the 1991 AQMP outlines a variety of control measures that should be implemented by local agencies, in conjunction with the SCAQMD and other agencies. A list of those measures is provided in Table IV-4. The measures identified in Table IV-4 include measures to reduce emissions from indirect sources, as well as Transportation Control Measures to reduce emissions from mobile sources.

Table IV-4
1991 AQMP Local Government Control (Tier I) Measures

AQMP Control Measure No.	Title
A-D-2	Control of emissions from swimming pool heating
A-D-3	Control of emissions from residential and commercial water heating
A-E-3	Control of dust from agricultural tilling
A-F-2	Control of emissions from construction and demolition activities and on-site vehicular flow
A-F-4	Low emission methods and materials for building construction
A-F-5	Control of dust emissions from wind erosion
E-C-1a/2b	Commercial electricity/natural gas conservation
E-C- 2a/2b/2c/2d	Industrial electricity/natural gas conservation and glass/paper recycling
E-C-3	Local government conservation
E-D-1a/1b	Residential electricity/natural gas conservation
M-G-6	Eliminate excessive car dealership cold starts
M-G-7	Eliminate excessive curb idling
M-G-9	Eliminate emissions from advertising vehicles
M-H-1	Environmental review program
M-H-2	Trip reduction for schools
M-H-3	Supplemental development standards
M-H-4	Special activity centers
M-H-5	Enhanced Regulation XV
M-H-6	Truck programs
M-H-7	Registration program
M-I-7	Eliminate leaf blowers
1a	Persons work trip reduction
1b	Non-motorized transportation
2a	Employer rideshare and transit incentives

Table IV-4
1991 AQMP Local Government Control (Tier I) Measures

AQMP Control Measure No.	Title
2b	Parking management
2d	Merchant transportation incentives
2e	Auto use restrictions
2f	HOV facilities
2g	Transit improvements
3 a	Truck dispatching rescheduling and rerouting
4	Traffic flow improvements
5	Non-recurrent congestion
12a	Paved roads
12b	Unpaved roads
13	Freeway and highway capacity
16	High speed rail
17	Growth management

Source: 1991 Air Quality Management Plan

The 1991 AQMP was designed to comply with the California Clean Air Act and the federal Clean Air Act Amendments of 1977. Due to the timing of adoption of the 1990 Clean Air Act Amendments, the implementation of the requirements of these amendments has not been directly assessed in the 1991 AQMP. Simply stated, the authority and regulations contained in the numerous federal and State air quality programs have been channeled into the AQMP, which serves to implement the various legal requirements. Therefore, to the extent that the City of Calabasas complies with the AQMP, it will also comply with the requirements of the California Clean Air and the federal Clean Air Act Amendments of 1977. Upon publication of a Federal Implementation Plan or equivalent document which identifies measures to comply with the federal Clean Air and its 1990 Amendments, the 1991 AQMP is the appropriate document for identifying control measures which have been identified for implementation by local agencies. Compliance of the Air Quality Element of the General Plan is ultimately determined by SCAG, who will examine the AQMP control measures (see Table IV-4), implementation actions, and schedule adopted by the City for conformity with the goals, policies and objectives of the AQMP.

OTHER REGIONAL PLANS

The AQMP is complementary to two other planning documents developed by SCAG: the Growth Management Plan and the Regional Mobility Plan.

GROWTH MANAGEMENT PLAN

As discussed in the Growth Management Plan, the underlying premise for the land use measures is that trips and mode choices are not only a function of the transportation system, but are also functions of housing density, the locations of land uses, and the way land uses relate to the transportation system. The Growth Management Plan identifies existing and projected demographic trends for 26 subregions within the basin, with Calabasas located in the Santa Monica Mountains subregion. According to the Growth Management Plan, this subregion had a jobs/housing ratio of 0.62 in 1984 and is projected to have a ratio of 0.74 by the year 2010. This ratio refers to the number of jobs in the subregion compared to the number of residential units, and is an indicator of the subregion's demographic "balance". A subregion has a balance of jobs and housing when there are adequate job opportunities for residents, or dwelling units for employees, or an average ratio of 1.27 jobs for every residential unit in 1984 or 1.22 in 2010. Job rich subregions have a ratio greater than the average, and housing rich subregions have ratios lower than the average. Thus, the Santa Monica Mountains subregion is considered housing rich. Table IV-5 provides additional demographic information regarding the subregions as identified in the Growth Management Plan.

Table IV-5
Growth Management Plan Projections
for Santa Monica Mountains Subregion

	1984	1988	2010
Population	58,100	88,400	106,400
Housing	21,300	30,200	42,900
Employment	13,200	N/A	31,800
Job/Housing Ratio	0.62	••	0.74

Source: Growth Management Plan, 1989.

The Growth Management Plan identifies the following potential strategies, which can be implemented by local agencies to reach the performance goals outlined in the Growth Management Plan:

- Require mitigation measures for proposals that worsen a subregion's jobs/housing balance.
- Establish local priorities for building infrastructure that supports job/housing balance.
- Locate new major facilities that are job inducing in job poor subregions.
- Identify growth industries and attract them with incentives.
- Educate and train workers so that businesses can find an appropriate labor force in relocation areas.
- Encourage housing development in job rich subregions by giving developers additional incentives.
- Reduce limitations on housing construction in job rich areas.
- Link transportation demand management measures to jobs/housing balance measures.

SCAG expects local jurisdictions, such as Calabasas, to comply with applicable and feasible performance goals outlined in the Growth Management Plan. However, these performance goals must also balance with local community values.

REGIONAL MOBILITY PLAN

Recommended transportation improvements focus on implementation of the Regional Mobility Plan, which is incorporated in the AQMP, and includes infrastructure improvements, bus system expansion, high occupancy vehicle lanes, traffic signal synchronization, and traffic pattern optimization. According to the Regional Mobility Plan, proposed projects in the vicinity of Calabasas include: construction of the Los Angeles to Ventura Commuter Rail line and two high occupancy vehicle lanes on State Route 101.

It should be noted that SCAG is currently in the process of developing a Regional Comprehensive Plan, which includes growth management and regional mobility elements. The proposed Regional Comprehensive Plan and its elements, once adopted by SCAG, would supersede the direction outlined above regarding the Growth Management Plan and Regional Mobility Plan. Circulation of a Draft Regional Comprehensive Plan is expected by the summer of 1993.

C. BIOTIC RESOURCES

This section reviews biological resources in the Calabasas study area. It inventories local flora and wildlife. The section also examines sensitive resources and species and identifies other biological issues. In addition, Appendix B contains a list of references utilized in determining the resources in the study area, the definitions of the legal status categories for sensitive biological resources, and descriptions of sensitive species and species of local concern. Appendix B also includes a complete discussion of the regulatory processes, permitting issues, and regulatory compliance issues relevant to biological resources in the study area.

FLORA

The following plant communities may be found within the Calabasas General Plan study area.

- Riparian woodland;
- Riparian scrub:
- Sycamore-alder riparian woodland;
- Southern coast live oak riparian forest;
- Other riparian areas, such as seeps and springs;
- Southern oak woodland:
- Valley oak woodland;
- California walnut woodland;
- Chaparral;
- Coastal sage scrub;
- Grasslands:
- Disturbed (ruderal); and
- Rock Outcrops

The above inventory of plant communities was obtained from a number of planning and environmental studies conducted in Calabasas. There are additional habitats identified in the various documents, such as grazed coastal sage scrub, overgrazed grassland, and coastal sage perennial grassland mosaic, that are not generally recognized as distinct habitat types. In addition, these areas are generally limited to specific locations and, therefore, are not included in this discussion of the overall resources of the Calabasas General Plan study area. The locations of plant communities in the study area are indicated on the Plant Communities Map located in the map pocket at the end of this document.

There may be additional habitats that have not been described because they are not found within the limits of the projects for which there is documentation. There may also be habitats that are identical to those on the above inventory, but have different names, such as oak woodland or southern oak woodland which comprise the southern coast live oak riparian forest.

The description of plant communities below is taken from Raven, et al. (1986) and Holland (1986). The sensitivity of these plant communities is described in the following section, Sensitive Plant Communities.

Riparian Woodland

Riparian woodland is used as a general term for woody plant communities found along streams and drainage channels. Physical characteristics of these communities include moist to saturated soils, water table levels near the surface or water at the surface during or part, of the year. Typical species include woody species such as alder (Alnus rhombifolia), willows (Salix spp.), cottonwoods (Populus spp.), and sycamore (Platanus racemosa). Herbaceous species include cattails (Typha spp.) and currants (Ribes spp.).

Riparian Scrub

Riparian scrub is similar to riparian woodland, except that the dominant species are scrub species, rather than trees. This habitat is characterized by low growing shrubs and scrubby trees such as sandbar willow (Salix hindsiana) and scrub oak (Quercus dumosa). Taller tree species, such coast live oak (Quercus agrifolia) and red willow (Salix laevigata) are not common, or dominant, in this habitat. The physical characteristics, such as soils and hydrological conditions, of these areas are similar, although riparian scrub can tolerate slightly drier conditions than riparian woodlands. Dominant species in this habitat include mulefat or baccharis (Baccharis spp.), short-statured willow trees such as sandbar willow, and young or emergent cottonwoods and willows.

Southern Sycamore Alder Riparian Woodland

Southern sycamore alder riparian woodland is a tall, open, broadleafed, winter-deciduous streamside woodland, growing along very rocky stream courses that are subject to seasonally high intensity flooding. The woodland is dominated by sycamore and alder. This habitat seldom has a closed canopy and in fact can be found as scattered trees in a scrub habitat. Understory species include poison oak and California blackberry (Rubus ursinus), bigleaf maple (Acer macrophyllum), stinging nettle (Urtica holosericea) and horsetail (Equisetum hyemale).

Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest is similar to riparian woodland, with the added element of oak trees (*Quercus* spp). Typically, southern coast live oak riparian forest extends out further from the direct line of the drainage as opposed to riparian woodland habitat, because oaks have a higher tolerance for drought conditions than most riparian species.

Other Riparian Areas, such as Seeps and Springs

Other riparian areas include alkaline seeps, springs and other areas that have water at or near the surface. These are areas where the water table is high, but aboveground flow is so little that no significant channel or channelization forms. These areas tend to be small and generally support small herbaceous species that are water dependent, such as some species of monkeyflower (*Mimulus* spp. and *Diplacus* spp.), cattails and hedge-nettle (*Stachys* spp.). These areas may also occasionally support larger, woodier plants such as mulefat or baccharis.

Southern Oak Woodland

Southern oak woodland is characterized by a relatively open canopy, with trees concentrated near but not necessarily confined to a streamcourse or riparian area. Oak woodland can occur on the hillside along a deeply incised drainage, but they are generally found on gentle to moderately steep slopes with moist, deep soils. Oak species predominate in this habitat, but other tree species include California bay (*Umbellularia californica*) and California walnut (*Juglans californica*). Shrubby understory species include poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*) and Mexican elderberry (*Sambucus mexicanus*).

Valley Oak Woodland

Valley oak woodland is a more open habitat than southern oak woodland, forming more of a savannah with a grassy understory than a closed woodland. This type of community is also referred to as a savannah woodland, although savannah woodlands can be dominated by other tree species in place of valley oak (*Quercus lobata*), including coast live oak, sycamore (*Platanus racemosa*) and similar large tree species. Physical characteristics are deep, well-drained alluvial soils, usually in valley bottoms. Valley oak is usually the only tree species present, with an understory of grass species such as wild oats and brome grasses. Other species found in this habitat include poison oak and rye-grass (*Elymus* spp.).

California Walnut Woodland

Walnut woodland exhibits characteristics similar to oak woodland, with the exception that walnut is the dominant species. In the Santa Monica Mountains, the California walnut is dominant, with an understory of toyon, holly-leaved cherry (*Prunus ilicifolia*), coffee berry (*Rhamnus californica*), chamise (*Adenostoma fasciculatum*) and ceanothus (*Ceanothus* spp.).

Chaparral

Chaparral is composed of hardy, woody evergreen shrubs that can form a dense, nearly impenetrable scrub. This community is generally found at higher elevations than coastal sage scrub, usually on deeper, heavier soils with a moderate moisture content. However, chaparral vegetation at lower elevations can be found on dry ridges with gravelly, shallow soils.

Chaparral is a fire-adapted community, which means that the plant species that form the community have evolved mechanisms for coping with fire and heat. These mechanisms include stump-sprouting and seeds with durable coats. Stump-sprouting species have a large stump or burl that is not killed by burning. In these species, when a fire burns the shrub back to the stump, the plant sprouts new growth from tissue on the burned stump.

Other species have evolved seeds that have durable coats. In these species, the adult plants are completely killed by fire, but the seeds are unharmed because the seed coat is thick and protects the living tissue inside. In many of these species, the seed coat is so thick that burning is required to scarify or crack the coat so that germination can take place.

The adaptation of the chaparral community to fire has progressed to the point where regular burning is required in order to maintain a healthy and vigorous population. Burning insures the conversion of dead wood into ash, resulting in the recycling of nutrients back into the soil. Burning also clears the ground of dense undergrowth and allows for the growth of seedlings and wildflowers that is suppressed in mature chaparral communities.

Chaparral takes a variety of forms, depending upon the dominant species. Raven, et al., identifies five different associations that may be based on different environmental conditions and post-fire succession stages: chamisal chaparral and red shank chaparral, found on low elevation south-facing slopes with shallow soils; ceanothus chaparral, common in recently burned areas; oak chaparral, found on moister, generally north-facing slopes; and mixed chaparral, the mature form found in deep soils.

With the exception of the mixed chaparral, each of the plant associations is characterized by a dominant species, such as chamise. However, the general species composition of the scrub component is fairly consistent, varying only in the relative dominance of each species. Typical scrub species in all chaparral communities include ceanothus, toyon, and scrub oak (*Quercus dumosa*), manzanita (*Arctostaphylos* spp.), coffeeberry, sugar bush (*Rhamnus crocea*), buckthorn (*Rhamnus* spp.) and holly-leaved cherry.

Coastal Sage Scrub

Coastal sage scrub is a lower elevation plant community, generally occurring on dry slopes below chaparral. It is composed of subshrubs or shrubs that are deciduous and not as stiff branched as chaparral plants tend to be. In the Santa Monica Mountains, the coastal sage scrub has a dense canopy, with little herbaceous ground cover. Typical species include California sagebrush (*Artemisia californica*), sages (*Salvia spp.*), California brittlebush (*Encelia californica*), laurel sumac (*Malosma laurina*), monkeyflower and buckwheat or eriogonum (*Eriogonum spp.*).

Grasslands

Grasslands form on deep soils, usually on fairly level terrain. The soil moisture can range from moist to almost saturated. Most of the native grasslands in the Santa Monica Mountains have been replaced by annual grasslands over time.

Annual grasslands are typically described as an introduced plant community containing primarily annual weedy species such as wild oats (*Avena* spp.), black mustard (*Brassica nigra*), brome grasses (*Bromus* spp.) and abu-mashi (*Schismus barbatus*). Other species include herbaceous wildflowers such as baby blue eyes (*Nemophila menziesii*), lupines (*Lupinus* spp.), owl's clover (*Orthocarpus purpurascens*) and blue dicks (*Dichelostemma pulchella*).

Native grassland contain perennial grasses such as needlegrass (*Stipa* spp.), bluegrass (*Poa* spp.), and herbaceous natives such as owl's clover, blue dicks, blue-eyed grass (*Sisyrinchium bellum*) and others.

Disturbed or Ruderal Weedy

Disturbed or ruderal weedy plant communities are typified by the presence of large areas of disturbance and excessive weedy growth. Vacant lots are typically occupied by ruderal plant communities with the common species being mustard, brome grasses, wild oats and filaree (*Erodium* spp.). The soil and other physical characteristics are variable, depending to a large degree upon the original plant community present before the disturbed community moved in. The prominent vegetative characteristics are the presence of non-native or native weedy species, with low species diversity but high numbers of individuals within a species.

Rock Outcrops

Rock outcrops, while sometimes having a separate suite of plant species associated with them, do not commonly have other characteristics (soil, slope, elevational limits) that help to define plant communities. As a result, they do not have a consistent set of floral characteristics. In other words, rock outcrop floras vary depending upon what plant community the rock outcrop is located in. Therefore, rock outcrops are not generally treated as a separate plant community. They can, however, function as a separate wildlife habitat much in the way that caves, old buildings and cultivated trees do, in that they attract wildlife with a particular need for shelter, basking, or foraging sites that are not defined by the plant species present, but rather the physical characteristics of the habitat.

WILDLIFE

The Santa Monica Mountains support a variety of wildlife species. The composition of the species present in a given area is dependent upon the plant community present, the availability of water and forage, and the time of the year for some species. A matrix of wildlife species in the study area and their habitats is found in Table IV-6.

Riparian and oak woodland habitats support a variety of bird species, especially raptors such as barn owl, great horned owl and Cooper's hawk. Flickers and woodpeckers use the larger trees in the oak woodland along with smaller passerines such as Wilson's warbler, Hutton's vireo, black-headed grosbeak, hooded oriole and Nashville warbler. Other animal species that use these habitats include the amphibians such as western toads and Pacific trees frogs, reptiles such as Pacific slender salamanders and ensatina salamanders, and mammals such as dusky-footed woodrat and mule deer.

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Ensatina	Х	Х	Х	Х	Х	Х		Х	Х					
Arboreal salamander*				Х	Х									
Garden slender salamander*	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
Western toad*	X	Х	X	×	×	Х	Х	Х		X	Х	Х		
California treefrog*	X	Х	Х	х	X									
Pacific treefrog*	X	Х	X	×	×	Х	Х	Х	Х	X	Х	Х	Х	
Western fence lizard	X	Х	Х	Х		х	X	Х	X	Х	Х	Х	Х	Х
Side-blotched lizard	Х	Х	Х	Х	Х	х	Х	X	X	Х	X	Х	Х	Х
Western skink									X	Х	Х	Х		Х
Western whiptail	Х					Х	Х		Х	х		X	. X	Х
Southern alligator lizard			X	×		Х	X		X		Х	Х	Х	
Western blind snake	Х	Х	Х	×		Х	Х	X	Х	Х				
Western yellow-bellied racer						×	X	X	Х	Х	Х	Х		Х
Coachwhip						Х	X	X		×		Х	Х	X
California whipsnake						Х	Х	X	Х	X				Х
Gopher snake						Х	Х	×	Х	Х	Х	Х	Х	Х
California kingsnake*	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х	X	X
California black-headed snake						Х	Х		Х	Х	Х	Х		X
California lyre snake					}	Х			Х	Х				Х

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Night snake						Х	Х	Х	Х	Х	Х	Х		
Southern Pacific rattlesnake	×	Х	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х
Killdeer											F,R,N	F,R,N		
Turkey vulture	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N,	F,R,N	F	F	F	F	F,R,N
Red-shouldered hawk	F,R,N	F	F,R,N	F,R,N		F	F	F						
Red-tailed hawk	F,R,N	F	F,R,N			F,R,N	F,R,N	F,R,N	F	F	F	F	F	F,R,N
American kestrel	F,R,N	F	F,R,N	R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F,N	
California quail	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F	F	F,R,N	
Band-tailed pigeon	F	F	F	F,R,N		F,R,N	F,R,N	F,R					F,R	
Rock dove											F,R,N	F,R,N	F,R,N	R,N,
Mourning dove					F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	
Greater roadrunner						F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F
Barn owl	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F,R,N	F,R,N
Great horned owl	F,R,N	F,R	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F	F,R,N
Western screech-owl	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N						
Common poorwill									F,R,N	F,R,N	F	F		F,R,N
White-throated swift	F	F	F	F	F	F	F	F	F	F	F	F	F	F,R,N

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	vow	cww	СНР	CSS	NG	AG	DIST	RO
Black-chinned hummingbird	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N							F	
Costa's hummingbird			F,R,N			F				F,R,N	F,R,N			F	
Anna's hummingbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R	F			F	
Rufous hummingbird	Migrant only	F,R	F,R	F,R	F,R	F	F,R		F,R	F,R	F,R,			F	
Allen's hummingbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N				F,R,N	
Northern flicker		F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F,R	F,R	F	F	F	
Acorn woodpecker		F,R,N		F,R,N	F,R,N		F,R,N	F,R,N	F					F,R,N	
Lewis' woodpecker	Winter only	F,R		F,R	F,R		F,R	F,R	F,R						
Red-breasted sapsucker	Winter only	F,R		F,R	F,R		F,R	F,R	F,R						
Downy woodpecker		F,R,N	F	F,R,N	F,R,N		F,R		F,R					F,R	
Hairy woodpecker		F,R,N		F,R,N	F,R,N		F,R		F,R						
Nuttall's woodpecker		F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N						
Western kingbird	Summer only			F,R,N			F,R,N	F,R,N	F,R,N	F	F	F,R,N	F,R,N		
Cassin's kingbird	Summer only			F,R,N			F,R,N	F,R,N				F,R,N	F,R,N		
Ash-throated flycatcher	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N				
Western wood-pewee	Summer only	F,R,N	F	F,R,N	F,R,N	F	F		F						
Black phoebe*		F,R,N													
Say's phoebe						F	F,R,N								
Pacific-slope flycatcher	Summer only	F,R,N	F	F,R,N	F,R,N	F	F	F	F	F	F				

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Violet-green swallow* Summe	only F	F,R,N	F	F,R,N	F,R,N	F	F	F	F	F	F	F	F	F	F,R,N
Northern rough-winged swallow* Summe	- 11	F,R,N	F,R,N	F,R,N	F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F
Cliff swallow* Summe	only F	F,R,N	F	F,R,N	F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F,R,N
Barn swallow* Summe	only	F	F		F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F
Scrub jay	F	F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R			F,R,N	
American crow	F	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F,R	F,R	F,R	F,R	F,R,N	
Common raven	F	F,R,N	F	F,R,N	F,R,N		F,R,N								
Wrentit	1	F,R,N	F,R,N			F				F,R,N	F,R,N			F,R,N	
Plain titmouse	1	F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F					
Bushtit	1	F,R,N	F,R,N	F,R,N	F,R,N		F,R,N		F,R,N	F,R,N	F,R,N			F,R,N	
White-breasted nuthatch		F,R,N		F,R,N	F,R,N		F,R,N	F,R,N	F						
House wren	1	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N			F,R,N	
Bewick's wren	1	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N		F,R,N	F,R,N	F,R,N			F,R,N	
Canyon wren										F,R,N	F,R,N				F,R,N
Ruby-crowned kinglet Winte	only	F,R	F,R	F,R	F,R	F	F,R	F,R	F,R					F,R	
Blue-gray gnatcatcher		F,R	F,R	F,R					F,R	F,R,N	F,R				
Western bluebird			F	F,R,N			F,R,N	F,R,N	F		F	F	F		
Hermit thrush Winte	ronly	F,R	F	F,R	F,R	F				F,R					

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	· vow	cww	CHP	CSS	NG	AG	DIST	RO
Varied thrush	Winter only	F,R			F,R	F									
American robin		F,R,N	F	F,R,N	F,R,N	F	F,R	F,R	F,R	F	F	F	F	F,R,N	
Northern mockingbird		F,R,N	F	F,R,N			F,R,N	F,R,N	F,R,N	F,R	F,R	F	F	F,R,N	
California thrasher		F,R,N	F,R,N			F				F,R,N	F,R,N				
Water pipit	Winter only											F	F	F	
Cedar waxwing	Winter only	F,R		F,R	F,R		F,R		F,R					F,R	
Phainopepla		F,R,N		F,R,N	F,R,N		F,R	F,R,N	F,R	F	F				
European starling		F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F	F	F	F	F,R,N	F,R
Hutton's vireo		F,R,N	F	F,R,N	F,R,N	F	F,R,N								
Warbling vireo	Summer only	F,R,N	F	F,R,N	F,R,N	F									
Orange-crowned warbler		F,R,N	F	F,R,N	F,R,N	F	F,R,N			F,R,N	F,R				
Yellow-rumped warbler	Winter only	F,R	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R	F	F	F,R	
Black-throated g rey warbler	Summer only	F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R	F,R						
Townsend's warbler	Winter only	F,R	F	F,R	F,R	F	F,R	F,R	F,R						
Hermit warbler	Migrant only	F,R		F,R	F,R	F	F,R	F,R	F,R						
MacGillvray's warbler	Migrant only	F,R	F,R	F,R	F,R	F									
Wilson's warbler	Migrant only	F,R	F,R	F,R		F									
Common yellowthroat		F,R,N	F,R,N	F,R,N	F,R,N	F,R								F	

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Black-headed grosbeak	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R	F,R	F,R	F,R					
Blue grosbeak	Summer only	F,R,N	F,R,N	F,R,N	F,R	F	F,R	F,R	F,R	F,R	F,R			F,R	
Lazuli bunting	Summer only	F,R,N	F,R,N	F,R,N	F,R	F	F,R	F,R,N	F,R	F,R,N	F,R,N				
Rufous-sided towhee		F,R,N	F,R,N	F,R,N	F,R,N	F			F,R	F,R,N	F,R			F,R,N	
California towhee		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R	F,R,N	F,R,N	F,R,N			F,R,N	F,R
Savannah sparrow	Winter only					F		F,R				F,R	F,R	F,R	
Song sparrow*		F,R,N	F,R,N	F,R,N	F,R,N	F				F,R,N	F,R,N			F,R,N	
Lark sparrow						F	F,R,N	F,R							
Chipping sparrow					F,R,N	F	F,R,N		F,R					F,R,N	
Dark-eyed junco		F,R	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R			F,R,N	
White-crowned sparrow	Winter only	F,R,	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R	F	F	F,R	
Fox sparrow	Winter only	F,R	F,R	F,R	F,R					F,R	F,R			F,R	
Lincoln's sparrow	Winter only	F,R	F,R	F,R		F				F,R				F,R	
Western meadowlark								F,R,N				F,R,N	F,R,N	F,R	
Red-winged blackbird*			F,R,N			F,R,N					F,R,N		F,R,N	F,R,N	
Brewer's blackbird							F,R,N	F,R,N	F,R,N		F,R,N		F,R,N	F,R,N	
Brown-headed cowbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F	F	F,R,N	
Northern oriole	Summer only	F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R				F,R,N	
Hooded oriole	Summer only	F,R,N		F,R,N	F,R	F	F,R	F,R	F,R					F,R,N	

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	- NG	AG	DIST	- RO
Western tanager Migrant only	F,R	F	F,R	F,R	F	F,R	F,R	F,R				Ad	DIGI	NO
American goldfinch	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R	F,R	F,R	F,R	F	F	E D AL	
Lesser goldfinch	F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F	F	F,R,N	
Lawrence's goldfinch	F,R,N		F,R,N		F	7,1,1	.,.,.	7,11,11	F,R,N	F,R,N	F	F	F,R,N F,R	
Purple finch	F,R	F	F,R	F,R,N	F	F,R,N	F,R	F,R	F	F	ľ	-	F,R	
House finch	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R	F	F	F,R,N	
Opossum	Х	Х	Х	X	X	X	X	X	X	X			X X	
Ornate shrew	Х	Х	Х	×	X	×	X	X		X	Х	X	-	
Gray shrew							X		Х	X		^		
California mole	Х	Х	Х	Х	X				X	^				
Little brown myotis	Х	X	Х	Х	X	Х		X					X	
California myotis	Х	X	Х	Х	Х	X	Х	X	X	Х				X
Yuma myotis	Х	Х	Х	Х	X	Х	X	X	X	X			X	X
Hoary bat	X	Х	Х	Х	Х	X	X	X	_^_				X	X
Red bat	Х	Х	Х	Х	X	X		X						X
Big brown bat	Х	Х	X	Х	X	X	X	X	Х	Х	X	V	V	
Western pipistrelle					X	X	X	X	X	X	X	X	X	X
Audubon cottontail	х	Х	Х		Х		×	X	X	$\frac{}{x}$	X	X	X	X
Brush rabbit							~~	^	X	×			X	

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	VOW	cww	CHP	CSS	NG :	AG	DIST	RO
Beechey ground squirrel							X			Х	Х	Х	×	Х
Western gray squirrel				Х		х	Х	Х						
Southern pocket gopher	X	Х	X	Х	Х	Х	Х	X	Х	X	Х	Х	Х	
California pocket mouse					X	Х	Х		Х	Х				
Pacific kangaroo rat									Х	Х				
Western harvest mouse*	X	Х							Х	Х	Х	X		
California mouse				Х		Х			Х	X				
Brush mouse					Х				Х	X				Х
Deer mouse	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	
Dusky-footed woodrat	Х	Х	Х	Х	Х	×			Х	X				
California meadow mouse							Х				Х	Х	X	
Norway rat													X	
House mouse											X	Х	X	
Mule deer	Х	Х	Х	X	Х	X	Х	X	X	X	Х	Х		
Gray fox	Х	Х	X	X	X	Х	Х	X	X	Х	Х			X
Coyote	Х	Х	Х		Х	X	X	Х	Х	Х	Х	Х	X	Х
Raccoon*	X	Х	X	Х	Х								X	
Ringtail*	Х	Х	Х		Х				Х	X				X
Long-tailed weasel*	×	Х	X	X	Х	X	Х	X	X	×	Х	Х	×	X

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	VOW	cww	CHP	CSS	NG	AG	DIST	RO
Badger											Х	Х		
Striped skunk	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	х	×
Spotted skunk*	Х	Х	Х	Х	X	Х	Х	Х	Х	Х				×
Mountain lion	Х	Х	Х	Х	Х				Х	Х				
Bobcat	Х	Х	Х	Х	Х				Х	Х				

Annual (Non-native) grasslands

Source: LSA Associates, 1992.

Riparian woodland

LEGEND

RW

RS	Riparian scrub		DIST Disturbed (ruderal)
SARW	Sycamore-alder riparian woodland		RO Rock outcrops
SCLO	Southern coast live oak riparian forest		
SS	Other riparian areas such as seeps and springs	X	Resident
sow	Southern oak woodland		B Breeding
VOW	Valley oak woodland	F	Foraging
CWW	California walnut woodland	N	Nesting
CHP	Chaparral	R	Roosting
CSS	Coastal sage scrub		Typically found along streams, lakes and ponds in these habitats.
NG	Native grasslands		

AG

Coastal sage scrub, chaparral and rock outcrops tend to support similar species, with such reptiles as western fence lizard, western whiptail, western rattlesnake and gopher snakes; birds such as towhees, sparrows, California thrasher, bushtit and wrentit; and mammals such as bats, woodrats, mule deer and bobcat.

Grassland habitats support mostly ground dwelling species, including reptiles such as the horned lizard; birds such as blackbirds, cowbirds, horned lark and mourning dove; and mammals such as black-tailed jackrabbit, Beechey ground squirrel and the Audubon cottontail. The golden eagle, red-tailed hawk and northern harrier forage over grasslands as well.

Ubiquitous animal species would include the American crow, common raven, northern mockingbird, house finch and side-blotched lizard.

Another biological resource of special concern in the Santa Monica Mountains areas is the preservation of wildlife corridors. The National Park Service, California Department of Fish and Game and the Santa Monica Mountains Conservancy have all expressed concerns about the adverse effects of urbanization, particularly in areas functioning as movement corridors.

Wildlife corridors are important for three main reasons. The first reason is that they allow movement through all habitat areas suitable for use by a species, even those areas not currently being used. The second reason is that corridors allow for recolonization of areas which were historically occupied but from which the species has been extirpated. The third reason is that corridors allow the exchange of genetic material to occur between populations, which is important in preserving genetic diversity within and between populations (Impact Sciences, 1982b).

The City of Calabasas is located at a crucial crossroads of habitat linkages. These linkages are indicated on Figure IV-1. It lies between the Santa Monica Mountains and the Simi Hills, and contains linkages connecting the Santa Monica Mountains, Simi Hills, Santa Susana Mountains, Los Padres National Forest and the Angeles National Forest. By far the largest protected habitat for wildlife species of concern are the San Gabriel Mountains. This is important because the wildlife linkages in Calabasas ultimately connect to the San Gabriel via the various mountain ranges. The San Gabriel Mountains are the largest protected habitat for wildlife species of concern and is important for Calabasas. If this reservoir of wildlife is destroyed, it is possible that some species now crossing into or using the Calabasas area will disappear.

Because of the fragmentation of habitats due to freeways, roads, housing development and other urban related barriers, the remaining linkages within the City of Calabasas need to be preserved. Studies by a research team from the California State University, Northridge (1987) has identified three "choke points" that constrain wildlife movement to a small narrow corridor. The "choke points" are the I-5 and S.R. 14 Freeway junction, the S.R. 118 and Topanga Boulevard area and the Ventura Freeway area between the Simi Hills and the Santa Monica Mountains.

These choke points represent areas where wildlife movement is severely restricted due to surrounding development. These choke points will influence the numbers and types of species moving into and through the City of Calabasas. The more choke points, the more the movement overall is restricted. The City of Calabasas needs to identify other potential choke points and plan for avoidance or minimization of increasing development around these choke points.

In response to the concerns regarding the loss of habitat linkages, the City has identified three linkages within the city limits that are slated for preservation. These three areas are as follows (Foundation Planning Document for the City of Calabasas, 1992):

The links between the Malibu Creek State Park, across Las Virgenes Road through Las Virgenes Water District land across the Ventura Freeway into Crummer Canyon and on into the Ahmanson Ranch property in Ventura County. This linkage has been the subject of the most intensive negotiation and preservation efforts.

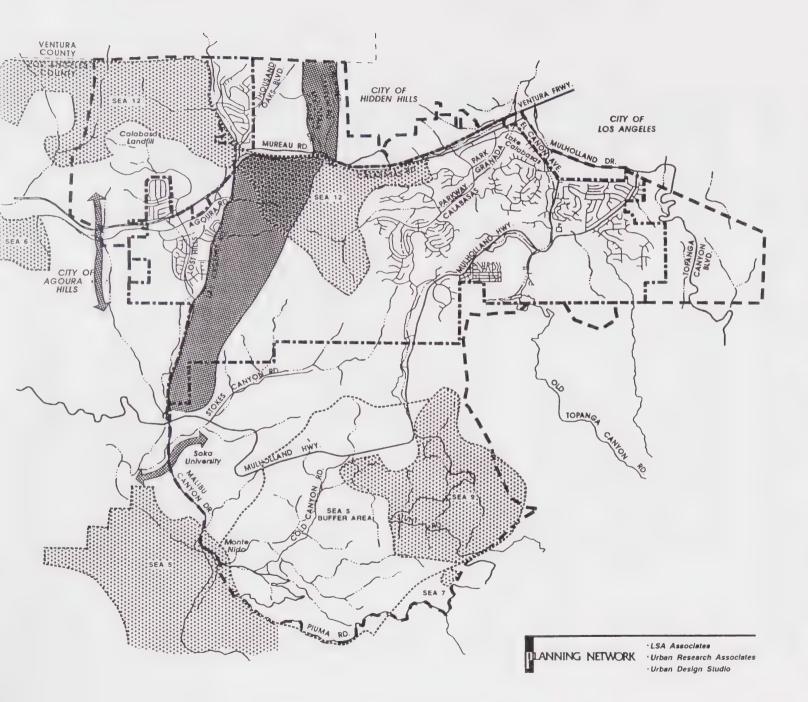
This linkage is critical for the City of Calabasas because it provides for wildlife movement from the maritime and scrub habitats of the coastal areas of Malibu through the coastal sage scrub, chaparral, and oak woodland habitats of the southern section of Calabasas through to the hilly scrub habitats of Ventura County. This linkage connects State park lands southwest of Calabasas with Los Angeles County designated Significant Ecological Area lands within the City to new national park land in Ventura County.

The links between Malibu Creek State Park and part of the Agoura Hills into Liberty Canyon. Liberty Canyon is now a part of the Santa Monica Mountains National Recreation Area to the north. The City is dedicated to working with all concerned agencies and groups to assure the preservation of this linkage.

This linkage is important because it connects the maritime and scrub habitats of the Malibu coast with the hilly scrub habitats of Ventura County. This linkage will connect State park lands with Liberty Canyon. Liberty Canyon will become part of the Santa Monica Mountains National Recreation Area to the north. Therefore, an important link for wildlife movement between these two large wildlife areas will be maintained.

The links running east - west between Malibu Creek State Park and Topanga State Park. There is presently an almost continuous connection of state and national lands between the two parks.

This linkage is important because it provides for wildlife movement from the maritime and scrub habitats of the coastal areas of Malibu through to the coastal sage scrub and chaparral habitats of the City's General Plan study area. This linkage provides an additional connection from Malibu State Park to the hilly areas of the City's General Plan study area through to Topanga State Park. This linkage passes through an almost continuous connection of State or nationally owned lands and is critical to maintaining the wildlife diversity of both parks. Constriction by future development will further impact this critical linkage.





CITY OF CALABASAS GENERAL PLAN

FIGURE IV-1

SIGNIFICANT ECOLOGICAL AREAS WITH SENSITIVE BIOLOGICAL RESOURCES

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



WILDLIFE LINKAGES/CORRIDORS



LOS ANGELES COUNTY DESIGNATED SIGNIFICANT ECOLOGICAL AREAS (SEA)



POTENTIAL BLUELINE STREAMS





SENSITIVE RESOURCES AND SENSITIVE SPECIES

Sensitive resources are those plants, animals, and habitats occurring or potentially occurring in the General Plan study area, which are endangered, threatened, rare or declining rapidly at a local, regional, State or national level. Legal protection for these resources varies widely, from the comprehensive protection extended to endangered species to no legal status at present. Definitions of the legal status categories are provided in Appendix B. A complete description of the sensitive biological resources (i.e., plant and wildlife species) is provided in Appendix B.

Sensitive biological resources occur throughout the Calabasas area. Both sensitive habitats and sensitive species, including listed and non-listed species, occur primarily in the undeveloped areas both inside and outside of the Los Angeles County Significant Ecological Areas (SEAs; see subsequent section).

Sensitive Plant Communities

Plant communities as yet have no legal protection, with the exception of wetland and riparian habitats. Therefore, there is no standard classification or rating of sensitivity for plant communities. However, most wildlife agencies, biologists and environmentalists acknowledge that certain plant communities (wildlife habitats) are more sensitive to loss or have undergone greater loss than others and that therefore, they require special consideration in environmental documents.

The following plant communities have been identified as sensitive:

- Coastal sage scrub
- California walnut woodland
- Oak woodland (both coast live oak and valley oak)
- Coast live oak riparian forest
- Southern sycamore-alder riparian woodland
- Small riparian areas (including seeps, springs, etc.)
- Riparian woodland
- Riparian scrub.

These communities are considered sensitive because they have undergone and continue to undergo decline and/or degradation due to development.

Sensitive Species

The sensitive plant and animal resources found in the Calabasas General Plan study area are the following:

- San Fernando Valley spineflower
- Santa Monica Mountains dudleya
- Many-stemmed dudleya
- Blochman's dudleya
- Braunton's milkvetch
- Santa Susana tarweed
- Lyon's pentachaeta
- Southwestern pond turtle
- Coastal western whiptail
- San Diego horned lizard
- Coastal patch-nosed snake
- San Bernardino ringneck snake
- San Diego mountain kingsnake
- Two-striped garter snake
- Black-shouldered kite
- Northern harrier
- Sharp-shinned hawk
- Cooper's hawk
- Swainson's hawk
- Golden eagle
- Merlin
- Prairie falcon
- Peregrine falcon
- Yellow-billed cuckoo
- Burrowing owl
- Long-eared owl
- Willow flycatcher
- Bank swallow
- California horned lark

	Coastal	COCTUC	14/500
-	Cuastai	cacius	WIED

- California gnatcatcher
- Loggerhead shrike
- Least Bell's vireo
- Yellow-breasted chat
- California yellow warbler
- Purple martin
- Southern California rufous-crowned sparrow
- Tricolored blackbird
- Bell's sage sparrow
- Summer tanager
- San Diego black-tailed jackrabbit
- Los Angeles pocket mouse
- Southern grasshopper mouse
- San Diego desert woodrat
- Pallid bat
- Townsend's big-eared bat
- California mastiff bat
- Valley oak ant
- Santa Monica Mountains hairstreak
- Santa Monica shieldback katydid
- Shedding primrose
- Wind poppy
- Monolopia
- Rabbitbrush
- Thread stem
- Small-flowered fiddleneck
- Hind's willow
- Prince's plume
- Big squirreltail
- Monarch butterfly
- Santa Monica Mountains band-winged grasshopper

- Coast Range newt
- Silvery legless lizard
- Rock wren
- Grasshopper sparrow
- Ringtail
- Badger
- Long-tailed weasel
- Mountain lion

Detailed descriptions of these species are presented in Appendix B.

LOS ANGELES COUNTY SIGNIFICANT ECOLOGICAL AREAS (SEAS)

Los Angeles County Significant Ecological Areas (SEAs) are areas that have been identified by the County of Los Angeles Significant Ecological Area Technical Advisory Committee as containing unique or unusual species assemblages, or areas of habitat that are rapidly declining in the Los Angeles County area. The Los Angeles County SEAs were set up to protect a special or sometimes unique collection of habitats and species from loss due to encroachment and human disturbances. However, the Los Angeles County SEAs are not intended to function as preservation areas in isolation. Additional preservation efforts will be required for those sensitive species and habitats occurring within the City of Calabasas but outside the Los Angeles County SEAs. The Los Angeles County SEA Nos. 5, 9, and 12 are located within the city limits and general Plan study area and the Los Angeles County SEAs No. 6 and 7 are adjacent to the General Plan study area limits. The Los Angeles County SEAs are indicated on Figure IV-1.

Los Angeles County SEA No. 5, Malibu Canyon and Lagoon, is described as an area that contains the only lagoon in Los Angeles County. The presence of a perennial stream which connects the dry interior mountain areas with the coastal zone across a sharp relief. This connection is unique to the Santa Monica Mountains, and allows for a unique and diverse biota in the region. The perennial stream in Malibu Canyon supports oak and riparian woodland with black cottonwood and leather-leaf ash trees. Malibu Canyon continues to support many wildlife, including mountain lion and golden eagles, despite declining populations over much of the Santa Monica Mountains. The riparian habitat provides resting and feeding areas for birds migrating along the coast. In addition, Malibu Creek is the only watercourse in southern California where steelhead continue to run and spawn. The lagoon at the mouth of the canyon provides two major plant communities, coastal salt marsh and coastal strand, that are declining along the coast. These habitats provide an important bird refuge for seasonal migrants. The lagoon has undergone serious degradation resulting from intensive recreational use. The Los Angeles County SEA No. 5 is located to the southwest of the study area slightly overlapping into the study area near Las Virgenes Road and Piuma Road.

The Los Angeles County SEA No 9, Cold Creek, is a relatively undisturbed natural sandstone basin found in the southern portion of the study area. The floor of the valley is steep, with springs and a perennial stream, Cold Creek. The year-round surface water, which is uncommon in Southern California, supports an unusually diverse flora. The extreme range in physical conditions, from wet streambed to dry rocky ridges makes the area a showplace for native vegetation. Pristine stands of chaparral, southern oak woodland, coastal sage scrub and riparian woodland are all found in the area. Several plant species that are uncommon to the general region are found here. Those include stream orchis (Epipachis giganea), red mimulus (Mimulus cardinalis), Humboldt lily (Lilium humboldtii var. ocellatum), big-leaf maple (Acer macrophyllum), and red shank (Fraxinus dipetala), reaching 40 feet in height, is a unique botanical oddity. This shrub species has a normal maximum height of 15 to 20 feet.

Due to its many outstanding botanical features, the area serves an integral role as part of the instructional program for many academic institutions, as well as a site for nature study and scientific research.

The Los Angeles County SEA No. 12, Palo Comado Canyon, was identified by the County of Los Angeles as one of the last examples of southern oak woodland savannah of any significant size in the County. It is composed of 2,760 acres divided into two distinct sections by a narrow constriction near the Ventura Freeway at Brents Junction (Las Virgenes Creek). The northern section includes portions of Palo Comado and Cheseboro Canyons in the Simi Hills. This section includes an extensive grassland community, patches of coastal sage scrub, and large areas of oak woodland and savannah with valley oak, coast live oak and walnut woodland. In the past, grazing has heavily impacted the few remaining native grasses and forbs, and most have been replaced with Eurasian species. The trees support an abundant population of raptorial birds and woodpeckers, and a variety of small mammals.

The section south of the freeway includes the McCoy Canyon, where slopes drain to the Las Virgenes Creek, and a series of north-south trending canyons and hills in the southcentral area. The vegetation in this section is similar to that in the north but includes orchards with citrus, plums and avocados, and has less extensive savannah type vegetation.

The Los Angeles County SEA No. 6, Las Virgenes, is located just west of the General Plan study area boundary in the hilly terrain west of Liberty Canyon. This area contains a number of plants species that are common throughout the interior areas of southern California, but are only found in this section of the Santa Monica Mountains. This area is relatively undisturbed, and does not have any significant development. The surrounding vegetation consists of coastal sage scrub and chaparral.

The Los Angeles County SEA No. 7, Hepatic Gulch, although located outside of the General Plan study area is close to, and potentially influenced by activities within the City of Calabasas. The Los Angeles County SEA is small, but possesses a vegetative association with many uncommon species and unique ecological relationships. The soil is constantly slumping in small patches scattered throughout the area, creating new surfaces for growth. This results in a complex patchwork of habitats, with a variety of different and unrelated habitats in juxtaposition. It is common, for example, to observe moisture dependent ferns and mosses growing in damp soil next to xerophytic, or drought-tolerant species, on dry hillsides.

OTHER BIOLOGICAL ISSUES

Regulatory Processes/Permitting Issues/Mitigation Compliance

There are at least five and possibly six permits or processes that will influence the progress of development in the City of Calabasas. Two of the actions involve the federal government, two the state government, and one a local ordinance. The sixth permit is administered by the State Water Resources Quality Control Board. These six permits/processes include: U.S. Army Corps of Engineers Section 404 permit; California Department of Fish and Game 1601/1603 Streambed Alteration Agreement; the Federal Endangered Species Act Section 10(a) permit, the State Endangered Species Act Section 2081 permit; the State Water Resources Quality Control Board water quality certification; and the City of Calabasas' Oak Tree Ordinance. These permits/processes are described in the following paragraphs. In addition, the multi-species approach to habitat preservation is also discussed. A complete discussion of these permits/processes and mitigation compliance may be found in Appendix B. A summary of the permits/processes follows.

Wetland/Jurisdictional Determination/Streambed Alteration

Drainages, streambeds, ponds and similar areas such as Las Virgenes Creek are subject to consideration as important resources under the jurisdiction of both the Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG). The determination of jurisdiction can be independent of the plant communities associated with these areas. Because proposed development within Calabasas city limits or General Plan study area may result in modifications to these areas, it may be subject to review by these agencies.

Wetlands are afforded special emphasis under both the State and federal programs. Wetlands are considered by the Corps and the EPA to be "special aquatic sites." Both CDFG and the U.S. Fish and Wildlife Service have strict policies regarding mitigation of wetland areas.

Because of the limited wetland and riparian resources in Southern California, the Corps and CDFG require compensatory mitigation for virtually every permit or agreement issued where unavoidable impacts to jurisdictional waters will occur. The level of mitigation required is generally based on the following factors:

- the quality of the resource being impacted:
- the difficulty of providing "in kind" mitigation;
- whether the mitigation is accomplished on or off site; and
- whether there is any time lag between when the impact occurs and when the created habitat is functional.

While a basic replacement ratio of 1:1 is occasionally adequate, especially for relatively easy to replace habitats such as cattail marshes, ratios of 2:1 or 3:1 for more complex habitat types are not uncommon.

Mitigation has been required at 2:1 ratios or greater for on-site mitigation of essentially dry washes. Recently, CDFG has required 3:1 replacement on essentially every Streambed Alteration Agreement.

Mitigation for impacts to wetlands is accomplished through obtaining appropriate permits from the Corps and CDFG. These permits include a Corps Section 404 Nationwide Permit (for small wetland areas), a Corps Section 404 Individual Permit (for larger wetland areas), and a CDFG Notification of Streambed Alteration. Specific requirements for these permits are described in Appendix B.

Army Corps of Engineers. Under Section 404 of the Clean Water Act, the Corps of Engineers (Corps) regulates discharges of dredged or fill material into waters of the United States, including wetlands. These waters include essentially any drainage course with defined banks or other evidence of flow, and other wetlands and non-wetland bodies of water that meet specific criteria as a jurisdictional wetland.

Therefore, any alteration to waters occurring in the study area that meet jurisdictional wetland criteria may be required to undergo review for a Section 404 Permit from the Corps. The Corps is thus responsible for reviewing the 404 Permits for environmental impacts of the proposed dredge or fill material.

California Department of Fish and Game. The CDFG, through provisions of the State of California Administrative Code (Section 1600 et al.), is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFG.

The CDFG policies for protection of stream resources are implemented through the 1601/1603 Streambed Alteration Agreement. The CDFG requires notification of any proposed streambed alteration as the result of a project. The 1601/1603 Notification may result in a 1601/1603 Agreement, which can request mitigation in the form of compensation for habitat loss.

Federal and State Endangered Species Acts

The Federal Endangered Species Act was passed to provide protection for species listed as endangered or threatened by the U.S. Fish and Wildlife Service. Endangered species are those that are threatened with immediate extinction if no protective actions are taken. Threatened species are those that will become endangered if no protective actions are taken. All federal government agencies, including the U.S. Fish and Wildlife Service are required to consider federally listed species and potential impacts to them that may result from any action by the agency. Such actions include use of federal monies and lands or actions, such as the issuance of permits.

All other public and private sector agencies and landowners are required to consider federally listed species when making decisions on land development and changes in land use. The only exemption is for federally listed plant species, which are not currently protected on private property.

Section 10(a) is that section of Federal Endangered Act that permits the incidental taking of a federally listed species. Incidental taking is defined as a "taking that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Section 10(a) permits are issued by the Secretary of the Interior. Before the Secretary will issue the permit, the applicant for the Section 10(a) permit must submit a detailed conservation plan.

The California Endangered Species Act was passed to provide protection for species that occur within the State boundaries that are listed as endangered, threatened or rare. The first two categories are similar to the Federal Endangered Species Act categories, while the rare category is similar to threatened but is applied only to plant species.

All public and private sector agencies and landowners are required to consider State listed species when making decisions on land development and changes in land use, in much the same way as a federal Section 7 Consultation. Local agencies and private parties must obtain authorizations for "take" under Section 2081 of the California Endangered Species Act.

Section 2081 is that section of California Endangered Species Act that permits the importation, exportation, taking, or possession of a state listed species and also candidate species (proposed for listing). A Section 2081 permit is issued by the CDFG. Section 2081 limits importation, exportation, take, or possession only for scientific, education or management purposes. This provision has been extended to allow take of species for individual projects, presumably under the management provision. Unfortunately, CESA does not precisely define the conditions under which issuance of a permit or Memorandum of Understanding is allowed for these projects. However, experience has shown that the information required for the federal Section 10(a) permit is also requested by the CDFG. Therefore, the type of information needed under Section 2081 is similar to that supplied for a Section 10(a) permit.

Water Quality

The State Water Resources Quality Control Board is responsible for permitting actions relating to water quality control issues. The State Water Resources Quality Control Board has the authority to issue a water quality certification prior to issuance of any Nationwide 404 Permits by the Corps.

Oak Tree Ordinance

The City originally adopted the County's oak tree ordinance (Sec. 22.56) which has since been superseded by City Ordinance No. 92-39. The new ordinance requires procurement of an oak tree permit prior to removal, alteration or transplant of trees conforming to the criteria in the ordinance. A number of specific requirements are outlined in the ordinance which apply to individual trees, and to a limited extent, tree canopies, as opposed to types of trees or communities. The intent of the ordinance is to extend protection to oak trees within the City, and avoid their removal, alteration or transplant, unless replacement is granted in conjunction with the oak tree permit conditions.

Multi-Species Preservation

Many governmental agencies have initiated efforts to protect multiple species within planning areas in an effort to minimize the preparation of successive documents each time a species is listed. These multiple species documents also provide for protection of candidate or sensitive resources that are not yet listed but may still warrant protection. A multi-species approach towards habitat preservation can effectively postpone, or ultimately eliminate, the need to list individual species that are candidates for State or federal listing. In addition, to the extent that preservation efforts conform to the State and federal guidelines for habitat conservation, a multi-species plan can be used as a basis for obtaining permits from the CDFG and U.S. Fish and Wildlife Service where a species is officially listed. Similarly, a multi-species plan can form the ground work for pre-listing agreements with the agencies, when individual development projects desire other processing alternatives. In Calabasas, although there are few known species listed by the CDFG and U.S. Fish and Wildlife Service, many are candidate species which could benefit by a multi-species planning effort. Currently, however, there are no such plans being undertaken in or around Calabasas.

D. WATER RESOURCES

SURFACE WATER RESOURCES AND WATER QUALITY

Four regional or subregional watersheds extend through the Calabasas study area which collect and ultimately convey runoff to the Pacific Ocean. These watersheds include the Las Virgenes Creek Watershed, the Medea Creek Watershed, the Arroyo Calabasas Watershed and the Topanga Canyon Watershed (see Figure IV-2).

Las Virgenes Creek Watershed

Las Virgenes Creek is a dominant drainage course of both the Las Virgenes Watershed and the regional Malibu Creek Watershed (the Las Virgenes Watershed is included within the Malibu Creek Watershed). Las Virgenes Creek ultimately joins with Malibu Creek to the south of the study area and flows into the Pacific Ocean.

The Las Virgenes Creek Watershed comprises approximately 60 percent of the study area. In addition to Las Virgenes Creek, this watershed includes the Stokes Canyon and Cold Creek Canyon tributaries. Malibu Creek extends into the City of Calabasas from Ventura County to the north, and travels through the City in a north-south direction near the western edge of the study area. Both Stokes Canyon and Cold Creek Canyon intersect Malibu Creek to the south of the city limits. These tributaries flow from northeast to southwest and are principally contained within the General Plan study area.

Medea Creek Watershed

Portions of the subregional Medea Creek Watershed, also contained in the regional Malibu Creek Watershed, drain the northwestern corner of the study area. Cheseboro Canyon, a tributary basin contained within the Medea Creek Watershed, is the only portion of the watershed contained within the study area boundaries. This tributary comprises approximately five percent of the study area. Both Cheseboro Creek and the adjacent Palo Comado Canyon (not contained within the study area) flow into Medea Creek which ultimately intersects with Malibu Creek prior to discharging into the Pacific Ocean.

Arroyo Calabasas Watershed

The subregional Arroyo Calabasas watershed flows into the regional Los Angeles River Watershed to the northeast. The Arroyo Calabasas Watershed comprises approximately 30 percent of the study area. In the study area, two tributaries are contained in the Arroyo Calabasas Watershed. These are the McCoy Canyon and Dry Canyon tributaries. Both tributaries occupy a significant portion of the eastern portion of the City of Calabasas and drain to the northeast.

Topanga Watershed

This watershed is comprised of two smaller tributary basins which extend along Old Topanga Canyon Road and Topanga Canyon Road. The watershed is located along the eastern portion of the study area, almost entirely outside of the corporate limits but within the study area.

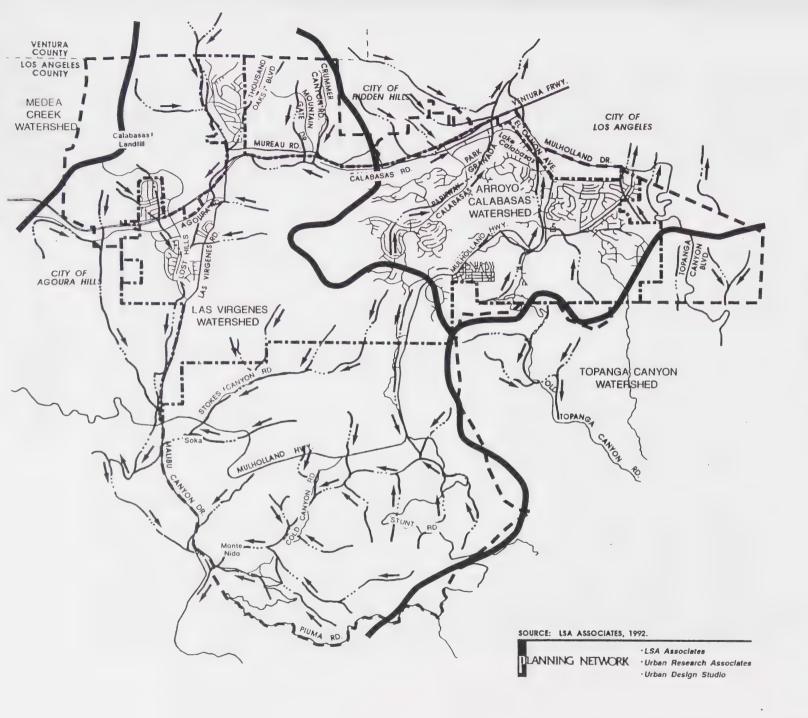




FIGURE IV-2

AREA WATERSHEDS

LEGEND

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CITY LIMITS



SPHERE OF INFLUENCE



DRAINAGE COURSES



WATERSHED BOUNDARY



DIRECTION OF FLOW





Surface Water Quality

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants in stormwater to water of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System permit. The 1987 amendments to the Clean Water Act added Section 402(p) which establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System program. On November 16, 1990, EPA published final regulations that establish requirements for applications for stormwater discharge permits for specified categories of industries. Construction activities of five acres or more are defined in the regulations as an industrial activity.

The City of Calabasas and 19 other cities are co-permittees with the County of Los Angeles on a region-wide National Pollutant Discharge Elimination System permit which has been obtained from the Regional Water Quality Control Board. The National Pollutant discharge Elimination System permit has been issued to comply with the Storm Water Quality Act of 1987 and is a federally mandated requirement with the goal to improve storm water runoff water quality. The City, the co-permittees, and the County of Los Angeles attend monthly meetings to maintain involvement with the NPDES process and monitor its progress.

The National Pollutant Discharge Elimination System permits fall into three categories: 1) Municipal, 2) Commercial/Industrial, and 3) Construction. The City and County permit falls into the Municipal permit category which outlines specific responsibilities and requirements to be addressed in a five year period. Three years have elapsed since issuance of the permit.

Principally, the City of Calabasas is responsible for their own storm drain system which includes local storm drain facilities and roadway curbs and gutters. Detailed permit provisions require that the City develop Best Management Practices at three levels to reduce pollution in runoff in the storm drain system. The City submitted the first level Best Management Practices (early action Best Management Practices which include erosion control, street sweeping, educational programs, etc.) and second level Best Management Practices (additional Best Management Practices which include more aggressive practices, such as adoption of local ordinances, and defining industrial development specifications for pre- and post-construction conditions) to the County, who has forwarded the Best Management Practices to the State for consideration and approval. To date, the State has not granted their approval. It is expected that the approval may occur in the fourth year of the permit. Additional actions await State approval of the first and second level Best Management Practices. Future city action will ultimately be needed to reflect the State's determination of Best Management Practice adequacy.

The City is now in the process of accelerating their Best Management Practice implementation process through identification of potential funding and staffing requirements necessary to support continued work with the National Pollutant Discharge Elimination System program. Thus far, the City has implemented the following Best Management Practices:

- Storm drain and catch basin cleaning program;
- Weekly street sweeping program; and
- Inventory of storm drain systems.

GROUNDWATER FLOW AND RECHARGE

The type of geologic formations and watershed conditions in the Calabasas region do not provide adequate opportunity for subsurface groundwater storage. As illustrated in Figure IV-2, the range of Younger Alluvium formation (i.e., that formation where significant groundwater conditions occur) is confined to the bottoms of drainage courses and is limited in area. The aquifers present in these shallow alluvium areas are limited to approximately 50 feet in depth (average). Although several water wells are currently operational within the study area, the yield is not reliable, and provides a limited source to rural properties. According to the Los Angeles County Department of Public Works Hydrologic Report, no groundwater basins are identified for the study area, which accounts for the need to import potable water from the Metropolitan Water District. The Hydrologic Report is prepared and updated every two years by the County for purposes of providing data to the public on hydrologic conditions. The report includes data and discussions including but not limited to groundwater levels and storage, water retained behind dams, quantities of water spread for recharge, amount of precipitation, erosion control, water quality, water conservation, evaporation and runoff.

As mentioned, the Younger Alluvium provides little storage of groundwater. As a result, there are no groundwater recharge opportunities within the study area. Nuisance runoff from landscape irrigation often aggravates the thin storage capacity in the bottoms of drainage courses resulting in localized shallow groundwater conditions and surface flow.

E. MINERAL RESOURCES

SURFACE MINING AND RECLAMATION ACT OF 1975

In response to the problem of conflicting land use and the essential need for mineral extraction, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA) of 1975. SMARA requires the State Geologist to classify, according to the presence or absence of significant mineral deposits, certain areas of the State subject to urban expansion or other irreversible land uses incompatible with mining operations.

The State Mining and Geology Board, upon receipt of the classification information from the State Geologist, consults with the appropriate lead agencies and other interested parties. After this consultation, the Board may designate identified mineral deposits in classified areas as being of statewide or regional significance. The objective of the classification and designation process is to assist local governments in preserving essential mineral resources that might otherwise be unavailable when needed.

According to State law, following formal designation by the Board of an area as a resource sector, the affected jurisdiction is required to establish mineral resource management policies in the General Plan that: (1) recognize the mineral information classified by the State Geologist and transmitted by the board; (2) assist in the management of land uses which affect areas of statewide and regional significance; and (3) emphasize the conservation and development of the identified mineral deposits.

RESOURCE CLASSIFICATION/DESIGNATION IN CALABASAS

The City of Calabasas lies on the northern side of the Santa Monica Mountains in Los Angeles County. Due to the fact that much of the City's area is currently undeveloped, the potential extraction of any valuable mineral resources has not yet been substantially precluded. In order to determine the presence or absence of valuable mineral resources (aggregate resource only) within city boundaries, a copy of the California Department of Conservation's (Division of Mines and Geology) Special Report No. 143 was reviewed.

This 1979 report, entitled *Mineral Land Classification of the Greater Los Angeles Area* has the stated objective to classify land in the Los Angeles area into Mineral Resource Zones based on 1978 Guidelines adopted by the California State Mining and Geology Board. The classification project (Slated to be completed by 2010) assists the State Mining and Geology Board, as mandated by the provisions of SMARA, in designating lands that are most needed for their mineral content.

According to Special Report No. 143, the vast majority of the City is included in the San Fernando Valley Production-Consumption Region, and has been classified as Mineral Resource Zone (MRZ) 3. MRZ 3 areas contain mineral deposits for which the significance cannot be evaluated from available data. In addition to the MRZ-3 classification, a small eastern portion of the City has been designated MRZ-1. This zone is defined as containing areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that the presence of mineral deposits is unlikely. The State, under SMARA, does not require protection of MRZ-1 areas.

That portion of the study area which lies within the National Park Service's Santa Monica Mountain National Recreation Area has not been classified by the State. According to Mr. John Alforse of the California Department of Mines and Geology, the past State policy was to avoid classification of mineral resources within federal park areas because the intent of SMARA was to provide local decision makers information with which to protect known valuable mineral reserves. Since local jurisdictions do not have the authority to regulate land uses on federal land, such lands were not included in the classification process.

However, as part of an ongoing update to the State's classification/designation program, areas previously not considered for classification are now being examined. Because the State is not expressly prohibited from classifying federal lands, there is a reasonable potential for some areas within the Santa Monica Mountain National Recreation Area (including areas also within the project boundaries) to be classified and/or designated in the future. The City's responsibilities under SMARA relative to the potential future classification of federal lands would depend upon the particular classification (i.e., MRZ-1, 2, 3, or 4). The City's responsibilities based upon the known areas of classification are discussed below.

According to Section 2762 of SMARA, once lands have been classified as MRZ-3 the affected lead agency must then, in accordance with State policy, establish mineral resource protection policies to be incorporated into its General Plan which will:

- Recognize mineral information classified by the State Geologist and transmitted to the State Mining and Geology Board.
- Assist in the management of land uses which affect areas of statewide and regional significance.
- Emphasize the conservation and development of identified mineral deposits.

When developed by the lead agency, such proposed mineral resource protection policies must be submitted to the State Mining and Geology Board for review and comment prior to adoption.

Further, Section 2762(2)(e) of SMARA states that prior to permitting a use which would threaten the potential to extract minerals in an area classified as MRZ-3, the lead agency may require the preparation of an evaluation of the area in order to determine the significance of the mineral deposit located therein. The results of the evaluation must then be transmitted to the State Geologist and the State Mining and Geology Board.



ENVIRONMENTAL HAZARDS



V. ENVIRONMENTAL HAZARDS

The Environmental Hazards section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Noise and Safety elements.

The Environmental Hazards Chapter includes the following major sections.

- Geology and Seismicity
- Fire Hazards
- Noise
- Hazardous Materials
- Disaster Response

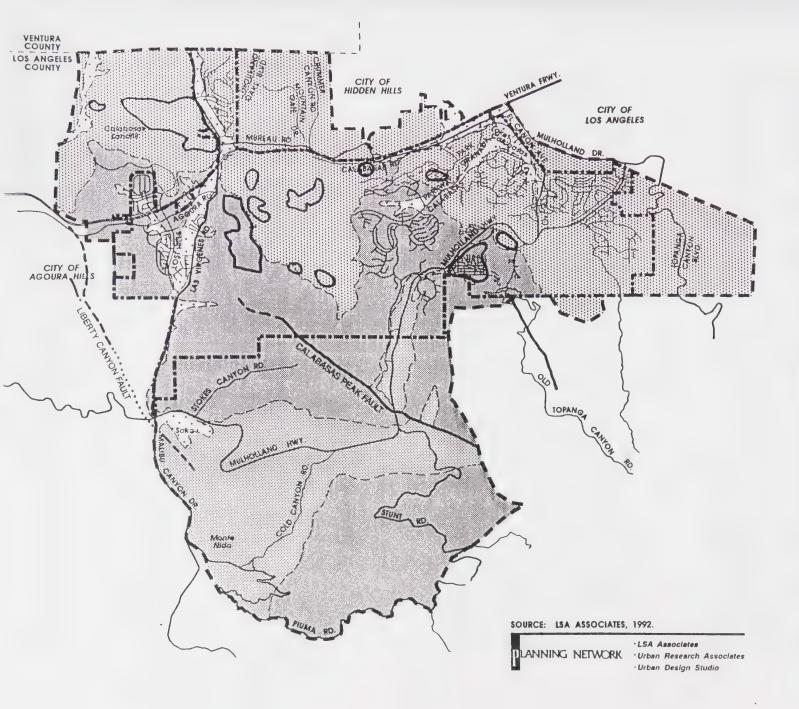
A. GEOLOGY AND SEISMICITY

The Calabasas General Plan study area is situated within the Transverse Ranges Geomorphic Province. This province covers the Transverse Mountain Ranges and structural basins that trend approximately east-west. This trend is unusual when compared with the majority of Southern California mountain ranges, which trend north-south. The tectonic forces that resulted in this mountain building are evident in the complicated geologic structure of the area.

MAJOR GEOLOGIC FORMATIONS

Local geological conditions within the Calabasas study area indicate a geology that is substantially diverse, as evidenced by the hillside and valley characteristics found throughout the study area. Four major geological formations are found within the study area boundaries as presented in Figure V-1. These include the Modelo Formation, the Topanga Formation (undifferentiated), the Conejo and other Volcanics Formation, and the Younger Alluvium Formation. Descriptions of these formations and their rock units are provided in Appendix D.

In the Calabasas region, the geology that has evolved includes mountains and the higher parts of hills representing structural highs, and valleys and the lower parts of hills reflecting structural lows. Overall, these conditions reflect the north to south stresses creating folds (a curve or bed in the strata) and accompanying thrust faults (a fault which results in movement of one rock unit over another). These stresses have been active at least since middle Miocene time (approximately twenty two and half million years ago), when major plate tectonic activity occurred. Plate tectonics is characterized on a global level and consists of large, broad, thick plates (plates composed of areas of both continental crust and ocean crust and mantle) each of which "floats" in the mantle and moves more or less independently of the other plates. Tectonic activity occurred after deposition of the Sespe Formation (a non-marine sandstone located in the Thousand Oaks area), and after encroaching seas had deposited the early Miocene Vaqueros Formation (which underlies the Topanga Formation in the Thousand Oaks area), and the earliest part of the middle Miocene Topanga Formation. The period of plate tectonic activity was accompanied by volcanic activity and may have included great offsets along major faults. Specific evidence for the plate tectonic activity does not seem to be present in the region.





CITY OF CALABASAS GENERAL

FIGURE V-1

GEOLOGICAL FORMATIONS

LEGEND

CITY LIMITS

SPHERE OF INFLUENCE



MODELO



TOPANGA



CONEJO AND OTHER VOLCANICS



YOUNGER ALLUVIUM



FAULT LOCATIONS





POTENTIAL AREAS OF MASS WASTING / LANDSLIDES





The final, known, widespread deposition of marine deposits in the region was during Delmontian time (about ten to nine million years ago). Subsequent to this period, uplift brought the entire region above sea level, and sculpturing of the modern topography began. Tectonic activity and uplift of the region, especially during middle Pleistocene time (about one million years ago), has further refined the geomorphic development. Broad valley areas, apparent terrace surfaces and benches between 900 and 1,400 feet in elevation in the Thousand Oaks area, similar in elevation to the highest coastal marine terraces, suggest further inundation by possible estuarine waters, possibly about 350,000 to 400,000 years ago (no fossil evidence for this inundation has been uncovered). Such waters undercutting slopes in the region may have triggered some of the still existing, large, ancient landslides. North to south tilting has caused the large landslides to occur on steepened north-facing slopes.

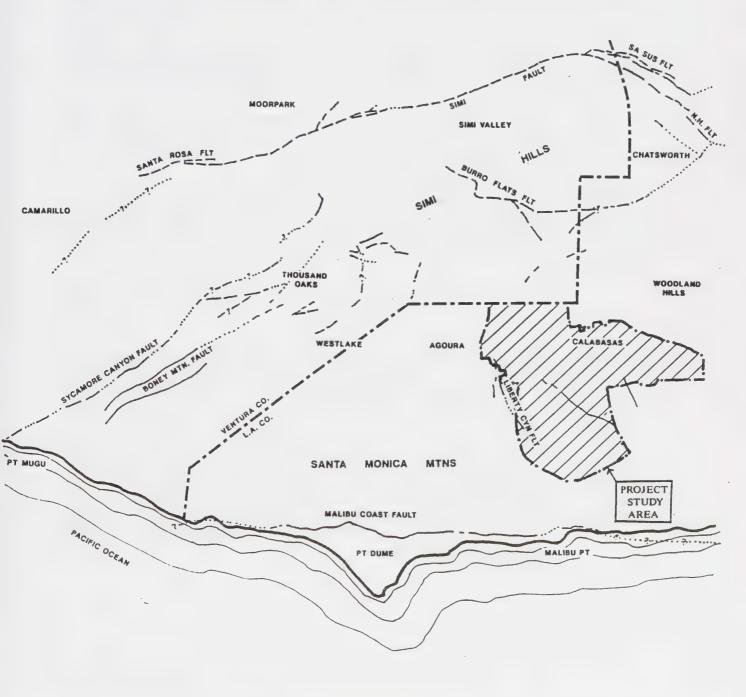
LOCAL FAULTS

Rocks of Miocene age and older in the Calabasas/West Los Angeles County area are cut by a complex system of faults (a surface or zone of rock fracture along which there has been displacement, from a few centimeters to a few kilometers in scale), of which none can be described as a "major fault." The two main fault zones (a fault that is expressed as a zone of numerous small fractures) in the area, are the Malibu coast fault zone, which lies to the south, and the Simi fault zone which lies to the north. Both systems are capable of producing moderate to large seismic events. A third regional fault zone, the Sycamore Canyon-Boney Mountain zone, which breaks up into shorter fault segments in the Thousand Oaks area, also affects the study area. One of the segments in this fault zone, the Boney Mountain Northeast fault, shows possible evidence of mid to late Quaternary displacement. Figure V-2 illustrates fault locations.



CALABASAS AL PLAN

FIGURE V-2 REGIONAL FAULT LOCATIONS



SOURCE: LSA ASSOCIATES, 1992.

ILANNING NETWORK

- LSA Associates
- Urban Research Associates

The principal faults and additional fault-related features in the area are described as follows:

Sycamore Canyon-Boney Mountain Fault Zones Potentially active faults generally do not occur in the region, but small displacement of late Quaternary age possibly may have occurred along the Boney Mountain Northeast fault. Therefore, this fault possibly should be considered as a potentially active fault.

The Sycamore Canyon-Boney Mountain fault zones may break up into shorter and weaker fault segments as the zones fade out to the northeast in the north part of the Thousand Oaks area.

- Liberty Canyon Fault Zone A north-trending fault concealed by alluvium has been mapped in Liberty Canyon. Indirect evidence also suggests that the fault may bend westward in the vicinity of the Ventura Freeway and fade out into bedding of the Topanga Formation.
- Possible Faults in North-South Canyons Possible northnorth-northeast-trending concealed faults may occur in Skeleton, Lindero, Las Virgenes and McCoy canyons according to the Division of Mines and Geology geology study.
- Calabasas (Red Rock) Fault This fault extends in a north-northwestward direction. No evidence for this fault in the study area could be found by the Division of Mines and Geology study.
- Lake Sherwood Fault Mapping for the Division of Mines and Geology geology study did not disclose evidence for this fault, which extends northeast from a point near Malibu Lake to a point near Liberty Canyon on the Calabasas U.S.G.S. quadrangle map.
- Other Regional Fault Systems Several other faults in the region may also affect the Calabasas study area, even though these faults may be a considerable distance for the City. These include the San Andreas Fault (approximately 40 miles from the study area), the Sierra Madre-San Fernando-Santa Susana Fault complex (approximately 15 miles from the study area), the Newport-Inglewood Fault system (approximately 20 miles from the study area) and the Malibu Coast Fault System (approximately 4-5 miles from the study area.

There are no known active faults within the Calabasas General Plan study area boundaries. Ancient inactive faults exist in various locations throughout the study area (as described above) but do not present significant hazards to planned land use or development. Nonetheless, insufficient data exists on a city-wide basis to unequivocally determine if the faults contained within or near the study area are potentially active. Therefore, where faults are known to extend into the study area, additional field investigations are required to determine the age of the earth material that is displaced on either side of the fault extension. Generally, if the displaced earth material is more recent than 11,000 years (Holocene period), the fault is considered active (and located in an Alquist-Priolo Special Studies Zone). Faults displacing material that is 11,000 years to 1.6 million years in age (the end of Quaternary period) are considered potentially active, and faults displacing material beyond 1.6 million years in age are inactive.

EARTHQUAKE MEASUREMENT

One method of measuring the magnitude of earth movement is the Richter Scale. This scale measures the magnitude (M) of energy released by an earthquake. The Richter Scale is a logarithmic scale whereby an increase of 1.0 on the scale represents an increase of about 32 times the amount of energy released. Thus, an M 6.0 earthquake releases 32 times as much energy as an M 5.0 event. This is the most common scale used to compare the "size" of earthquakes, as it is an objective measure based on the energy released by a particular earthquake.

SEISMIC SHAKING

In the Calabasas region, seismic shaking that can occur as a result of a large regional earthquake or of a great, relatively distant earthquake is considered potentially destructive. In Calabasas the most severe damage from shaking would result to structures located on fills not meeting engineering standards for compaction or foundation design. Severe seismic shaking could also activate landslides, especially during wet weather, and possibly trigger displacement along relatively minor faults.

Although the Calabasas-Agoura-Eastern Thousand Oaks area lies well within the region of Southern California where large earthquakes have taken place, the area has not been an epicenter of a large historic earthquake. Table V-1 provides an accounting of the seismic activity that has occurred in the region in recent historical times.

Table V-1
Regional Historic Seismic Activity

Earthquake Location	Intensity	Date of Occurrence
Pt. Mugu	5.7	1973
San Fernando	6.5	1971
Wheeler Ridge	7.7	1952
Santa Barbara	5.9	1941
Santa Barbara	6.3	1925
Newhall	± 6	1893

Source: LSA Associates, Inc., March 1993.

Based on historical records, major earthquakes most likely affect the area within the next 50 to 100 years would be one of the following:

- A magnitude six to seven earthquake on the potentially active Malibu Coast Fault system.
- A magnitude six to seven earthquake on the active Sierra Madre-San Fernando-Santa Susana fault complex.
- A magnitude six to seven earthquake on the active Newport-Inglewood fault system.
- A magnitude eight or greater on the San Andreas Fault system located to the northeast of the study area.

It is anticipated that these earthquakes could produce peak ground accelerations within the underlying bedrock materials on the strong motion scale of 0.1g (gravity) which is considered low to moderate intensity, to 0.4g which is considered moderate intensity. This falls within an intensity range which does not require unique or special foundation design or building construction techniques. Peak accelerations over 0.5g do require special structural augmentation.

The two faults closest to Calabasas on which moderate to large earthquakes might be expected to occur are the Simi fault zone to the north and the Malibu Coast fault to the south. These faults are similar to the San Fernando fault zone to the east (the site of the 1971 San Fernando earthquake) which also strikes roughly east and demonstrates reverse movement from north to south. Geologic mapping by the Division of Mines and Geology along this zone after the earthquake revealed previous thrusting of bedrock over older alluvium of late Quaternary, pre-Holocene age, as occurs along both the Malibu Coast and Simi fault zones.

Strong seismic shaking caused by an earthquake on the Malibu Coast fault might trigger ground breakage along small faults that are apparently unrelated to the causative fault of the earthquake. Strong shaking from such an earthquake would cause considerable heaving and probable liquefaction (a temporary transformation of earth material into a fluid mass caused by a collapse of the structure by shock or strain, e.g., by earthquake) and consequent settling or sliding of some water-soaked or partially wet colluvium, alluvium and artificial fill although the liquefaction potential in Calabasas is low. Some modern hillside fills on which residences are constructed might fail, as they did in the Granada Hills area during the San Fernando earthquake. If, at the time of an earthquake, the terrain were also soaked by heavy rains, renewed sliding of many older landslides probably would occur. Precariously perched boulders, in volcanic rock and Upper Cretaceous sandstone locations could shake ioose and roll down slopes. Rock debris could shake down on steep slopes of resistant sandstone and cherty shale which overlie softer rocks. These slopes lie north of the Ventura Freeway to the west of Las Virgenes Canyon, and south of the freeway to the east of Las Virgenes Canyon.

An additional regional fault zone which may be potentially active is the Burro Flats-Reservoir fault zone, which lies about four miles north of Calabasas. This fault is significant because, along with the Northridge Hills and one additional northwest-tending fault, it may displace Upper Quaternary alluvial sediments in the northwest corner of the San Fernando Valley, and therefore could be potentially active. Portions of these faults are within a northeast-trending zone of seismic activity which extends from Point Dume on the southwest to Palmdale on the northeast. The zone, which is nearly four miles wide, extends from Liberty Canyon on the southwest to beyond Laskey Mesa on the northeast.

Evidence suggestive of movement along the Boney Mountain Northeast fault is a prominent northeast-trending escarpment 50 to 75 feet high, nearly two miles in length, in a southwest-trending tributary of Arroyo Conejo. An escarpment is described as a long, more or less continuous cliff or relatively steep slope facing in one direction, breaking the general continuity of the land by separating two level or gently sloping surfaces, and produced by erosion or faulting.

Most features of older construction that have led to earthquake damage, especially lack of reinforcement in adobe and brick buildings, are no longer permitted in new construction. Most of the construction in the Calabasas area has taken place since 1950, and is, therefore, subject to considerably less potential danger than areas with older construction. Most residential construction in Calabasas has occurred during an era when building codes required more earthquake resistant construction techniques and standards. This does not mean, however, that considerable damage would not occur in Calabasas during severe shaking caused by earthquakes even as far as 50 or more miles away. Nonetheless, there are portions of Calabasas that pre-date 1950, such as the north eastern portion of Calabasas near the Los Angeles City boundary, as well as other small pockets of development located primarily in the hillsides. These areas are more likely to contain structures that could be impacted by earthquake activity.

SEISMIC STUDY ZONES

The State Legislature enacted the Alquist-Priolo Special Studies Zones Act in 1972 as a result of concern about the public safety near hazardous faults. To assure that homes, offices, hospitals, public buildings, and other structures for human occupancy are not built on active faults, the Act requires a geological investigation before a local government can approve most development projects in special studies zones. The Act implies that a program for special studies zones must be incorporated into the General Plan as well as carried out through zoning laws, and local development standards.

The Act also requires that the State Geologist delineate special studies zones around all potentially and recently active traces of major faults in California. As addressed in the California Division of Mines and Geology Special Publication No. 42 (Fault Hazard Zones in California, Revised 1988), the Calabasas study area does not contain any of these zones and is free of fault zones that are subject to the Alquist-Priolo Act provisions. As stated above, there are no active faults known to be within the Calabasas study area boundaries. Therefore, the Calabasas General Plan is not required to contain a program to address the special studies zone issues.

MASS WASTING

Mass wasting is a general term for the dislodgement and downslope gravitational transport of soil and rock material. It includes such displacements as creep (the slow, gradual deformation of the rock materials under the gravitational stresses), solifluction (the slow, viscous, downslope flow of waterlogged soil), and rapid movements such as mud and debris flows, and landslides. Mud flows are described as a mass movement landform and a process characterized by a flowing mass of finely-grained earth material possessing a high degree of fluidity during movement. Debris flows are a high density mudflow containing abundant coarse-grained materials, and resulting from an unusually heavy rain. Landslides are generally defined as covering a wide variety of mass movement landforms and processes involving the moderately rapid to rapid downslope transport of soil and rock material by means of gravitational stresses.

The features of mass wasting in the Calabasas area range upward in magnitude from expansive and creeping soils and slope wash, to several relatively large, ancient, bedrock landslides. Most of the expansive soils and slope wash and the principal landslides occur in the lower and middle part of the Modelo Formation, and also include parts of the Topanga Formation. Features of mass wasting are common in most of the areas where these folded rocks are exposed, but are most common in the terrain of prominent hills cut by south-trending canyons such as Las Virgenes Canyon in Calabasas. Figure V-1 illustrates the locations in Calabasas that are subject to mass wasting and landslides.

Many deep-seated landslides are common in north- and east-facing slopes, mainly because of the influence of continued regional tilting upward to the north-northeast. This tilting has caused streams to gravitate toward south and west sides of canyon and valley bottoms, where they have undercut north-and east-facing slopes, and caused such slopes to be relatively steeper and more prone to sliding than slopes on the opposite sides of the affected valleys and canyons. In addition, the relatively greater amount of moisture retained on north-facing slopes has probably also influenced sliding.

One of the largest ancient landslide masses occurred on north-facing slopes northwest of Brents Junction in the Calabasas area. This landslide involves relatively contorted and generally folded, but mostly gently dipping shale bedrock of the lower part of the Modelo Formation.

A second large landslide feature consists of a group of closely related landslides on the east side of the Las Virgenes Canyon, southeast of Brents Junction in Calabasas. These landslides extend westward, away from the steep cliff terrain which is characteristic of the outcrop of the siliceous shale of the lower part of the Modelo Formation, near where it overlies the Topanga Formation. Small landslides derived from these larger landslide masses occurred during the winters of 1968-1969 and 1969-1970.

Additional, relatively large landslide masses occur in the steep, west-facing slopes of Cheseboro Canyon and in the upper part of Las Virgenes Canyon just over the boundary into the Ventura County. A possible large ancient landslide may underlie part of the area on which Calabasas Highlands is developed, as indicated in the State Division of Mines and Geology Open File Report 84-1. This has been identified as a feature of approximately 50 acres on the southside of Dry Canyon that is suggestive of an ancient northwest-facing landslide. If the feature is a landslide, it may be partially stabilized at its toe in Dry Canyon by alluvium and fill buttressing of the canyon. According to the City of Calabasas Building Department, the area continues to be affected by unstable earth conditions.

B. FIRE HAZARDS

The City of Calabasas is contained in Fire Zone IV. This zone includes wildland fire hazard areas defined as watershed lands that contain native growth and vegetation. Development located in or within 500 feet of native vegetation is subject to special development provisions specified in the fire code. These provisions may require special roofing materials, chimney spark arrestors, and vegetation clear zone buffers. Development in Fire Zone IV may be considered a higher risk due to the wildland interface characteristics associated with locating development adjacent to open space lands. For this reason, Fire Zone IV requires adherence to the above special building provisions that are not required in the other fire zones.

C. NOISE

FUNDAMENTALS OF NOISE

Noise Definitions

Sound is technically described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Figure V-3 graphically illustrates some common noise sources and their instantaneous noise levels in terms of dBA.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech interference, sleep interference, physiological responses and annoyance. Based on these known adverse effects of noise, the federal government and the State of California have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Noise Assessment Criteria

Several rating scales exist to analyze adverse effects of noise on the community. These scales include the Equivalent Noise Level (L_{eq}) , Day-Night Average Noise Level (L_{dn}) , and the Community Noise Equivalent Level (CNEL).

Equivalent Noise Level, L_{eq} is a sound energy level averaged over a specified time period (usually one hour). L_{eq} represents (in a single numerical value) the amount of variable sound energy received by a receptor over a time interval. For example, a one hour L_{eq} noise level measurement would represent the average amount of energy contained in all of the noise that occurred in that one hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time varying effects of noise on sensitive receptors.

Unlike L_{eq} , the Day-Night Average, L_{dn} and Community Noise Equivalent Level, CNEL, are both based on 24 hours of measurement. L_{dn} and CNEL also differ from L_{eq} because they apply a time weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when sleep disturbance is a concern). "Time weighted" refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive time periods. Noise occurring during the daytime period (7:00 a.m. to 7:00 p.m.) receives no penalty for either the L_{dn} or CNEL noise metrics. In the case of CNEL, noise during the evening time period (7:00 p.m. to 10:00 p.m.) is penalized by five dBA, while nighttime (10:00 p.m. to 7:00 a.m.) noise is penalized by ten dBA. The 24 hours of noise are then averaged on an energy (logarithmic) basis to obtain the CNEL value. The L_{dn} noise metric differs from the CNEL noise metric in that the duration of the daytime period is from 7:00 a.m. to 10:00 p.m., thus omitting the evening time period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. The highest instantaneous measurement during any period is referred to as L_{max} .

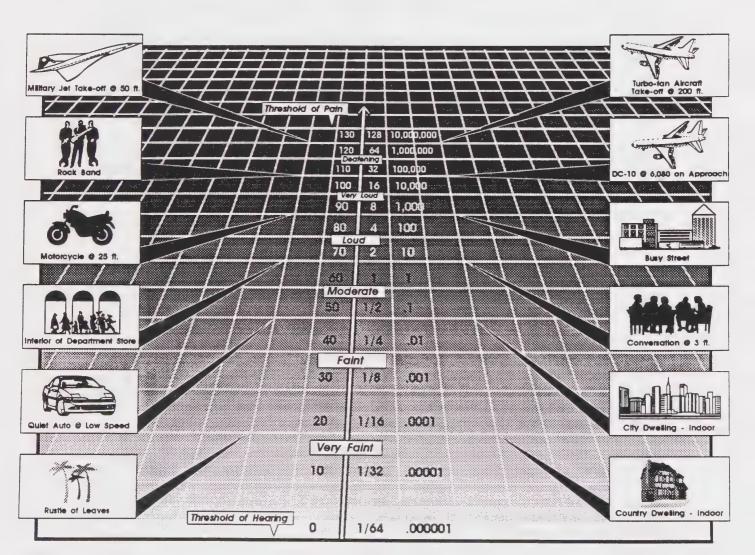


CALABASA

GENER

FIGURE V-3

COMMON NOISE SOURCES AND NOISE LEVELS



SOURCE OF SOUND

SOUND LEVEL PERCEIVED dB(A)

LOUDNESS

RELATIVE SOUND ENERGY

SOURCE OF SOUND

SOURCE: COFFMAN AND ASSOCIATES, 1991.



HUMAN REACTIONS TO SOUND

Sensitivity to noise varies widely from one individual to the next. Some people are acutely aware of very low levels of noise, while others seem oblivious to high noise levels. These variations may be attributed to temperament, prior "noise history" (the levels of noise to which the listener is accustomed), hearing impairment, and age.

Although there is wide variation in human response to noise, certain general statements may be made regarding noise impact upon the average person:

- 40 to 45 dBA (L_{eq})- Sleep interference may occur at or above these levels.
- 60 to 65 dBA (L_{eq})- Speech at normal conversation levels becomes difficult; speech intelligibility is impaired.
- 85 dBA (L_{aq})- Exposure to noise levels at or above 85 dBA for extended periods of time may lead to permanent hearing damage. Federal and state occupational safety and health laws are in place to protect individuals from excessive levels of noise in the workplace.

However, the level of noise may be reduced by distance, doubling the distance will reduce noise by 8 dBA. Other techniques such as sound walls and heavy landscaping may affect people's perception of how "loud" the noise seems.

LAND USE COMPATIBILITY WITH NOISE

The State of California's Office of Noise Control has established standards and guidelines for acceptable community noise levels based on the CNEL rating scale. The purpose of these standards and guidelines, summarized in Figure V-4, is to allow public agencies a framework in setting standards for human exposure to noise and preparing noise elements.

SENSITIVE RECEPTORS

Sensitive receptors are those land uses that require serenity or are otherwise adversely affected by noise events or conditions. In Calabasas, these land uses include, but are not limited to schools, libraries, churches, and residential uses.

Acceptable Exterior Noise Exposures

Figure V-4 illustrates the State of California, Office of Noise Control's Land Use Compatibility Matrix of community noise environments for various land use categories. As shown in this figure, a normally acceptable designation indicates that a specified land use achieves all noise reduction requirements with standard construction. By comparison, a conditionally acceptable designation implies that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use type is made, and the needed noise insulation features are incorporated by design. In general, sensitive land uses should not be exposed to noise levels indicated by normally unacceptable conditions, or clearly unacceptable conditions.



CITY OF CALABASA

GENERAL PLAN

FIGURE V-4
LAND USE
COMPATIBLITY FOR
COMMUNITY NOISE
ENVIRONMENTS

LAND USE CATAGORY	COMMUNITY NOISE EXPOSURE Lan OR CNEL, dB 55 60 65 70 75 80
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES	
RESIDENTIAL - MULTI-FAMILY	
TRANSIENT LODGING - HOTELS, MOTELS	
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES	
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES	
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS	
PLAYGROUNDS, NEIGHBORHOOD PARKS	
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES	
OFFICE BUILDINGS - BUSINESS, COMMERCIAL & PROFESSIONAL	
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE	

INTERPRETATION

NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

SOURCE: OFFICE OF NOISE CONTROL, CALIFORNIA DEPARTMENT OF HEALTH.



As shown in Figure V-4, single family and multi-family residential uses, schools, libraries, and churches have a normally acceptable community noise exposure range of 60 dBA CNEL to 70 dBA CNEL. Most communities use 60 dBA CNEL or 65 dBA CNEL as their exterior residential noise standard. Office buildings are normally acceptable up to 70 dBA CNEL. Industrial and manufacturing land uses, being less sensitive to noise, are normally acceptable where the exterior noise levels are 75 dBA CNEL or less.

On the national level, the Federal Highway Administration places residences in Activity Category B, which specifies a maximum exposure level of 67 dBA L.

Acceptable Interior Noise Exposures

The California Commission of Housing and Community Development adopted noise insulation standards for the state in 1974. On November 14, 1988, revisions to these standards (Title 24, Part 2, California Code of Regulations) were approved. The revised standards mandate that interior noise levels attributable to exterior sources not exceed 45 dBA L_{dn} or CNEL in any habitable room.

The Commission further specifies that an acoustical analysis shall be required for residential structures that are, or will be, located within the L_{dn} or CNEL contour of 60 dBA or greater where associated with an existing or proposed freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial use. The analysis must show that the building will limit interior noise to a level of 45 dBA (L_{dn} or CNEL).

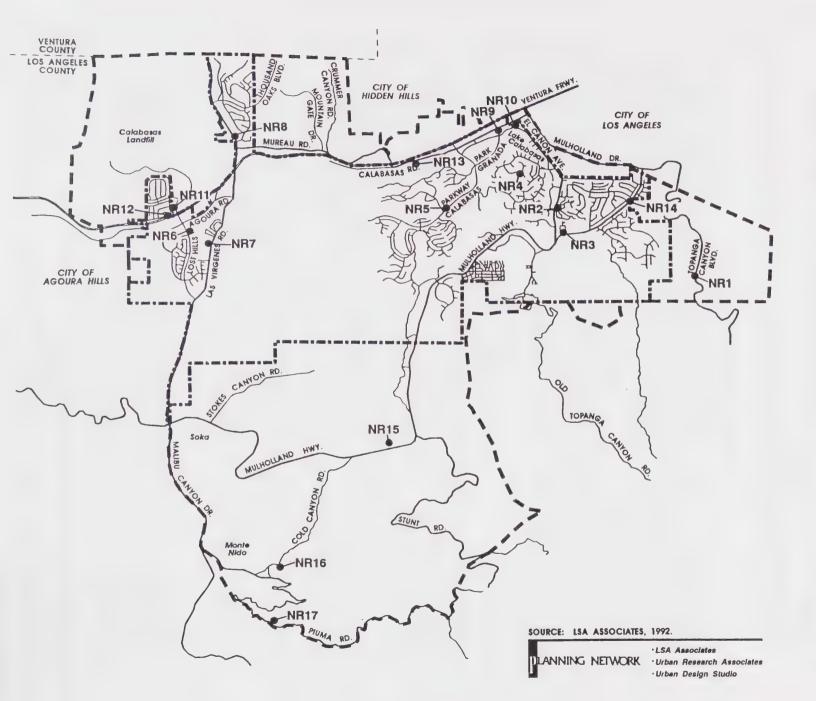
EXISTING NOISE ENVIRONMENT

Existing noise measurements were collected at representative noise sensitive receptors within the City and the City's General Plan study area. These measurement sites (shown in Figure V-5) were selected to determine the noise environment adjacent to roadways at representative land uses. These existing measured L_{eq} s are presented in Table V-2.

The noise measurements were conducted using a Metrosonics db-3100 Metrologger Sound Level Meter set for slow response on the A-weighted decibel (dBA) scale. To ensure accuracy, the Metrosonics was calibrated before and after each measurement using the Metrosonics cl-304 Calibrator. Measurements were ten minutes in duration, except at one site, NR5, where a five minute measurement was made.

Since the noise measurements were made as L_{eq} s, they are compared to the FHWA exterior noise standard of 67 dBA L_{eq} . This comparison is meant to be a point of reference only, and not as an absolute criterion of conformance to the FHWA standard. This is because the noise measurements are intended to give a "broad brush" impression of noise levels throughout the City, and are not intended to be a definitive study of any one area within the City of Calabasas.

Existing noise levels were also analyzed using a computer model based upon the Federal Highway Administration Traffic Noise Prediction Model (FHWA-RD-77-108) together with key roadway and site parameters. The computer model does not account for topographical shielding, and is thus a "worst case" analysis. The results of the existing noise modelling are presented in Table V-3 in terms of CNEL.





CITY OF CALABASAS

FIGURE V-5

NOISE RECEPTOR LOCATIONS

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



NOISE RECEPTOR

RURAL RESIDENTIAL SF RESIDENTIAL SCHOOL SF RESIDENTIAL

GOLF COURSE/SF RESIDENTIAL OFFICE/SF RESIDENTIAL MF RESIDENTIAL NR 8 MF RESIDENTIAL
NEIGHBORHOOD COMMERCIAL

NR 10 NR 11 COMMERCIAL SF RESIDENTIAL

NR 12 COMMUNITY PARK NR 13 NR 14 COMMERCIAL

SF RESIDENTIAL RURAL RESIDENTIAL NR 15 NR 16 RURAL RESIDENTIAL NR 17 STATE PARK





Table V-2
Noise Field Measurement Data Summary

Noise Receptor Site					Measurement Duration Measured		
	Roadway	Land Use	Date	Time	Measured L _≪	(Minutes)	Lmax
NR 1	Topanga Canyon Road	Rural Residential	10/27/92	11:00	69.1 dBA	10	84.8 dBA
NR 2	Old Topanga Canyon Road	SF Residential	10/27/92	11:48	67.4 dBA	10	80.0 dBA
NR 3	Mulholland Highway	School	10/27/92	12:12	66.1 dBA	10	80.1 dBA
NR 4	Park Alisal	SF Residential	10/27/92	12:38	54.0 dBA	10	67.9 dBA
NR 5	Parkway Calabasas	Golf Course/SF Residential	10/27/92	13:15	66.2 dBA	5	81.4 dBA
NR 6	Lost Hills Road	Office/SF Residential	10/27/92	15:03	69.5 dBA	10	82.1 dBA
NR 7	Las Virgenes Road	MF Residential	10/27/92	15;30	68.7 dBA	10	77.3 dBA
NR 8	Las Virgenes Road	MF Residential	10/27/92	15:55	64.6 dBA	10	74.4 dBA
NR 9	Calabasas Road	Neighborhood Commercial	10/27/92	16:35	60.4 dBA	10	69.5 dBA
NR 10	Highway 101	Commercial	10/27/92	17:00	74.1 dBA	10	77.9 dBA
NR 11	Highway 101	SF Residential	10/28/92	11:40	74.1 dBA	10	78.8 dBA
NR 12	Canwood Street/Highway 101	Community Park	10/28/92	11:40	74.1 dBA	10	78.8 dBA
NR 13	Highway 101	Commercial	10/28/92	12:30	72.2 dBA	10	80.9 dBA
NR 14	Mulholland Highway	SF Residential	10/28/92	13:59	63.5 dBA	10	73.7 dBA
NR 15	Mulholland Highway	Rural Residential	10/28/92	14:30	65.5 dBA	10	84.3 dBA
NR 16	Cold Canyon Road	Rural Residential	10/28/92	14;59	64.2 dBA	10	80.6 dBA
NR 17	Piuma Road	State Park	10/28/92	15:25	50.0 dBA	10	68.8 dBA

Source: LSA Associates, Inc., December 1992.

Table V-3
Existing Noise Levels - Modelling Results

				Distance to Contours		
Roadway	Speed Limit (mph)	ADT	CNEL 100'from Centerline (dBA)	60 dBA (ft)	64 dBA (ft)	70 dBA (ft)
Ventura Freeway (Highway 101)						
Mulholland Dr I/C/Pkwy Calabasas I/C	55	157000	81.2	13058	4129	1306
Pkwy Calabasas I/C/Las Virgenes Rd I/C	55	152000	81.0	12642	3998	1264
Las Virgenes Rd I/C/Lost Hills Rd I/C	55	136000	80.5	11311	3577	1131
Lost Hills Rd I/C/Liberty Canyon Rd I/C	55	142000	80.7	11810	3735	1181
Lost Hills Road						
North of Highway 101	30	6700	58.9	78	25	, 8
Highway 101 Overcrossing	30	9800	60.6	114	36	11
Highway 101/Agoura Road	30	16300	62.8	189	60	19
Agoura Road/Malibu Hills Road	30	11900	61.4	138	44	14
Malibu Hills Road/Meadow Creek Lane	30	9000	60.2	104	33	10
North of Las Virgenes Road	30	7000	59.1	81	26	8
Las Virgenes Road						
North of Thousand Oaks Blvd	45	4200	61.2	130	41	13
Thousand Oaks Blvd/Morrison Ranch Rd	45	7400	63.6	230	73	23
Morrison Ranch Rd/Parkmor Road	45	9300	64.6	289	91	29
Parkmor Road/Mureau Road	45	13400	66.2	416	132	42
Mureau Road/Highway 101	45	15100	66.7	469	148	47
lighway 101/Agoura Road	45	27500	69.3	854	270	85
Agoura Road/Glen Street	45	17500	67.4	543	172	54
Gien Street/Meadow Creek Lane	45	16300	67.0	506	160	51
leadow Creek Lane/Lost Hills Road	45	23400	68.6	727	230	73
ost Hills Road/Mulholland Highway	50	18900	68.9	769	243	77
outh of Mulholland Highway	50	20700	69.3	842	266	84
outh of Piuma Road	50	20300	69.2	826	261	83

Table V-3
Existing Noise Levels - Modelling Results

· · · · · · · · · · · · · · · · · · ·				Distance to Contours		
Roadway	Speed Limit (mph)	ADT	CNEL 100'from Centerline (dBA)	60 dBA (ft)	64 dBA (ft)	70 dBA (ft)
Agoura Road						
West of Lost Hills Road	45	1600	57.0	50	16	5
Lost Hills Road/Las Virgenes Road	45	8800	64.4	273	86	27
Mureau Road						
East of Las Virgenes Road	35	3700	57.9	62	20	6
Mountain Gate Dr/Crummer Canyon Rd	35	3400	57.5	57	18	6
North of Calabasas Road	35	6200	60.1	103	33	10
Calabasas Road						
Mureau Road/Parkway Calabasas	40	6600	61.8	152	48	15
Parkway Calabasas/Park Granada Blvd	40	12500	64.6	289	91	29
Park Granada Blvd/Mulholland Drive	25	16500	61.0	127	40	13
Parkway Calabasas						
Calabasas Road/Park Granada Blvd	40	7300	62.3	169	53	17
Park Granada Blvd/Park Entrada	40	8900	63.1	206	65	21
Park Entrada/Paseo Primaro	40	6200	61.6	143	45	14
Paseo Primaro/Camino Portal	40	3700	59.3	85	27	9
Camino Portal/Palmilla Drive	40	1500	55.4	35	11	3
South of Calabasas Road	40	11700	64.3	270	85	27

Source: LSA Associates, Inc., 1993.

Based on existing noise measurements and modelling, the primary source of noise in the City is traffic on the Ventura Freeway, regional highways (Las Virgenes Road, Mulholland Highway, Topanga Canyon Boulevard) and on major and secondary city streets. Consequently, land uses (particularly sensitive receptors) located adjacent to roadways may be affected to a lesser or greater extent, depending on proximity to the roadway. The City of Calabasas has pursued and will continue to pursue the construction of sound walls, where necessary, along the Ventura Freeway and other major roadways as a means of noise mitigation. Other means of traffic noise mitigation which are less visually imposing than sound walls include increased setbacks, landscaped berms, and acoustic site planning as a means of noise mitigation.

Freeway and Highway Noise

Four noise measurements were taken along the Ventura Freeway, two along Las Virgenes Road, three along Mulholland Highway, and one along Topanga Canyon Road. The highest noise levels in the City were measured along the Ventura Freeway, as shown in Table V-2. Noise levels along the Ventura Freeway were in excess of the FHWA's noise standard of 67 dBA L_{eq} , ranging from 72.2 dBA L_{eq} to 74.1 dBA L_{eq} . Noise levels along Topanga Canyon Road and Las Virgenes Road south of the Ventura Freeway were also in excess of the FHWA standard. Noise levels along Mulholland Highway, and Las Virgenes Road north of the Ventura Freeway were below the FHWA noise standard of 67 dBA L_{eq} .

The noise modelling results shown in Table V-3 largely confirm the findings of the field measurements. The CNEL at 100 feet from the centerline of the Ventura Freeway is predicted to range from 80.5 dBA CNEL to 81.2 dBA CNEL. High traffic volumes along Las Virgenes Road south of the Ventura Freeway result in high noise levels there, ranging from 67.0 dBA CNEL to 69.3 dBA CNEL at 100 feet from the centerline. Noise levels along Las Virgenes Road north of the Ventura Freeway are considerably lower, ranging from 61.2 dBA CNEL to 66.7 dBA CNEL; noise levels on Mulholland Highway range from 57.7 dBA CNEL to 66.2 dBA CNEL; and a noise level of 65.1 dBA CNEL along Topanga Canyon Road.

Major and Secondary Street Noise

As shown in Table V-3, noise measurements were taken along Old Topanga Canyon Road, Parkway Calabasas, Lost Hills Road, Calabasas Road, Cold Canyon Road, Park Alisal, and Piuma Road. The noise levels adjacent to Old Topanga Canyon Road and Lost Hills Road were 67.4 dBA L_{eq} and 69.5 dBA L_{eq} , respectively, exceeding the FHWA noise standard of 67 dBA L_{eq} . Noise levels adjacent to the other roadways in the noise survey were below the FHWA standard, ranging from 54.0 dBA L_{eq} to 66.2 dBA L_{eq} .

Results of noise modelling for these major and secondary street is shown in Table V-3. Old Topanga Canyon Road is predicted to have existing CNEL noise levels at 100 feet ranging from 56.2 dBA to 62.4 dBA. Parkway Calabasas is predicted to have CNEL's at 100 feet of between 55.4 dBA and 64.3 dBA, while Lost Hills Road ranges from 58.9 dBA CNEL to 62.8 dBA CNEL. Calabasas Road is predicted to range from 61.0 dBA CNEL to 64.6 dBA CNEL at 100 feet from the roadway centerline.

Commercial/Industrial Noise

Noise from the commercial and industrial land uses in the City of Calabasas is not an existing, significant concern. This is due primarily to the small percentage of these uses existing in the City, as well as their location adjacent to the Ventura Freeway and local arterials. Nonetheless, at the interface of these land uses with existing sensitive receptors, including residential uses, a potential noise conflict may exist. Intermittent noise from truck deliveries may result in occasional disruption of nearby residents. Through reviewing the data on the existing noise conditions (Tables V-2 and V-3), it appears that the predominance of noise is generated from vehicular traffic utilizing the Ventura Freeway (SR-101) and the arterial roadways that carry traffic through the City of Calabasas to the Malibu coast. Consequently, noise generated by commercial and industrial uses in the City does not appear to adversely affect adjacent sensitive residential and other sensitive uses when compared with the roadway noise.

Aircraft Noise

Occasional noise from aircraft overflight does occur, but, as a result of the high altitudes, the noise levels are relatively low in Calabasas. Aircraft that may fly over the study area include those originating/terminating at the Van Nuys Airport, located approximately 10 miles from Calabasas, and the Burbank-Glendale Airport, located approximately 17 miles from Calabasas. Aircraft using the Van Nuys Airport typically are smaller, private aircraft, with the exception of occasional military flight activity. Those using the Burbank-Glendale Airport include a broader mix, including the larger regional commercial commuter jets flying at high altitudes.

Discussions with the City planning staff indicate that the primary community complaints regarding aircraft are from residents near the Sheriff's Station located on Agoura Road, where Sheriff's Department helicopters make occasional takeoffs and landings.

Generally, aircraft noise in Calabasas has not been a significant problem for the overall community. The long distance to the nearest airports and high altitude of flights above the City are factors that minimize the aircraft noise exposure in Calabasas.

Construction Noise

The hillside residential areas which constitute much of Calabasas contain large homes whose residents have pursued the serenity and isolation of these locations. Construction noise could affect this serenity where noise is projected into residential neighborhoods. Some noise disturbance in areas adjacent to construction sites is to be expected. These disturbances are due to demolition, grading, construction of new buildings, and relocation activities. Construction typically requires the use of heavy earth moving equipment and occasional blasting where hard rock is encountered.

Although construction noise will be a short-term impact, there is the potential for disruption of nearby residents if steps are not taken to limit the intensity and duration of their noise exposure. The City has temporarily adopted the County of Los Angeles Noise Ordinance, which limits any construction related activity to between the hours of 6:30 a.m. and 6:00 p.m., Monday through Saturday. However, the City is investigating revisions to construction noise provisions which could establish a new period for construction activities from 7:00 a.m. or later to 5:00 p.m. during weekdays. Weekend construction activities may be prohibited. Compliance with noise ordinance restrictions on construction activities will help minimize potential short-term construction impacts.

D. HAZARDOUS MATERIALS

The accidental release of any hazardous material is a potentially serious incident, which is addressed under the County of Los Angeles "Hazardous Waste Management Plan", and has been adopted by the City of Calabasas. This plan addresses hazardous material accidents based on State guidelines as developed by the State Office of Emergency Services. Developed in response to the passage of a State law requiring each county in California to deal with the management of hazardous waste, the purpose of the County Hazardous Waste Management Plan is to provide a more effective framework for managing the County's hazardous waste consistent with State law and requirements of the State Department of Health Services.

DEFINITION OF HAZARDOUS MATERIALS

A hazardous material is defined as any injurious substance, including pesticides, herbicides, toxic metals and chemicals, volatile chemicals, explosives, and nuclear fuels and materials. The use of hazardous materials is commonplace in modern industrial and agricultural activities. Because these materials are increasingly used in urban and rural settings, and because they represent such a serious potential threat to human health and safety, strict laws and regulations have been developed to control their use, storage, disposal, and transport.

Hazardous materials can be classified into four general categories: explosives, flammables, irritants, and toxins. Explosives can produce rapid chemical reactions causing damage due to blast and flash fire. Flammables are dangerous because of their low ignition temperature and rapid burning characteristics. Some flammable materials burn so violently that they cannot be extinguished, and must be allowed to burn out naturally. Irritants can cause inflammation or destruction of living tissue with effects ranging from mild to severe, based on the degree of exposure and type of material involved. Toxins include various poisons which are harmful or fatal if swallowed, inhaled, or ingested through the skin. Because of their widespread use, many types of hazardous material are transported through, used, or stored, to some degree, within the City of Calabasas.

TRANSPORT OF HAZARDOUS MATERIALS

The transport of hazardous materials by truck or rail is regulated by the United States Department of Transportation through National Safety Standards. The federal safety standards are also included in the California Administrative Code, Environmental Health Division. The California Health Department regulates industrial hazardous waste haulers only.

The California Highway Patrol is responsible for the general enforcement of motor carriers hauling hazardous wastes. The major transportation artery within the study area is Highway 101. Three basic methods of enforcement are employed, as follows:

Truck scales issue "compliance ratings", which monitor maintenance, vehicle code, safety, and cargo compliance with federal, state and local laws.

- The California Highway Patrol Motor Carrier Safety Unit conducts inspections at "terminals," which are generally areas or yards where trucks are parked and/or operated from, for example, school bus terminals, truck stops/yards; and
- A "Mobile Road Enforcement Program" is employed, which utilizes two officers to patrol roadways with the authority to set up lane inspections on city and county roadways, as well as on state highways.

STORAGE AND USE OF HAZARDOUS MATERIALS

The City of Calabasas experienced rapid residential growth prior to the City incorporation. Along with this growth, the potential for growth in hazardous materials storage and transportation has increased to some extent. Regulations and enforcement of safety measures for the storage and use of hazardous materials is the responsibility of many agencies, including local fire agencies. National, state, and local fire codes act as a guideline for local enforcement.

The Environmental Protection Agency (EPA) ensures that containers of hazardous materials are properly labeled with instructions for use. The California Department of Industrial Relations, Cal-OSHA Division, regulates the proper use of hazardous materials.

Because Calabasas is primarily a residential community, large areas of industrial/commercial activities do not currently exist. However, there are some commercial and industrial uses in the study area that use hazardous materials, which could pose a threat. Due to the small number and size of these facilities in Calabasas, it is unlikely that large amounts of hazardous materials are used or stored in the City.

DISPOSAL OF HAZARDOUS WASTES

Currently, there are no active landfills operating in Los Angeles County which accept hazardous wastes. Hazardous wastes generated within the County, which are disposed off-site, are transported to Kettleman Hills Landfill in Kern County and to Casmalia Landfill in Santa Barbara County. Both facilities are considered to be active "Class One" landfills, capable of handling all types of urban wastes, including toxic and hazardous materials (except explosives and radioactive materials).

E. DISASTER RESPONSE

An Emergency Preparedness Committee has been formed in City of Calabasas for the purpose of identifying and planning for various local emergency conditions. The committee has developed an Emergency Preparedness Plan which addresses policies and procedures to be implemented in the event of an emergency situation or disaster. This plan is currently in a draft stage, and has not yet been adopted by the City of Calabasas.

The City recently established an emergency operating communications center at City Hall. The Center is equipped with modern communications equipment to assist in coordinating with emergency response agencies (e.g., County Sheriff's and Fire Departments) during an emergency condition. They rely on amateur band radios and transmitters to communicate with these agencies.

As identified by the plan, the most probable emergency situations the City will face would be landslides, flooding, hazardous materials spills, or managing resources in the aftermath of an earthquake.

Three key factors in dealing with an emergency or natural disaster situation are as follows:

- Damage Assessment: It is critical that a realistic survey, utilizing City staff and Calabasas Emergency Relief, be made to assess the damage that has occurred. This will help to control rumors and assure that accurate information is given out to the media, and State and Federal Disaster Assessment teams, and also provides the Director of Emergency Services a basis upon which to make judgements as far as allocation of resources.
- **Communication:** In a crisis situation, the City will need to utilize every available resource, primarily radio and telephone communication. In any emergency situation, the information from the field will need to be relayed on an on-going basis to the Emergency Operating Center. The citizen leaders within the City and/or City staff will report to the Emergency Communication Center. The Director of Emergency Services will need to be kept up to date at all times.
- **Documentation:** Documentation will relate to keeping track of work time, use of City owned or rental equipment, and work locations. During the height of an emergency, it will likely be difficult to document these items, but this is the only way that disaster reimbursement can take place, and can make the difference in how much reimbursement the City can receive after the emergency has passed.

EMERGENCY OPERATING CENTER

The Emergency Operating Center will serve the following purposes:

Serve as a clearing house to collect and plot damage assessment information;

- Allow the City of Calabasas to coordinate the best use of resources in an emergency situation;
- Provide a central location for distributing public information; and
- Provide a central location to check in and assign volunteer disaster service workers.

In most cases, the emergency situation will be handled by the police, fire, and public works crews in accordance with established departmental procedures and response capabilities. However, when necessary, the Emergency Center will be activated.

TEMPORARY SHELTERS

Temporary shelters to house evacuated persons are considered to be as specified by The American Red Cross. Activation and staffing of evacuation centers will be handled by The American Red Cross, upon direction by the Director of Emergency Services.

FLOOD/MUDSLIDE WATCH

This would be a situation where existing conditions and expected rainfall, as well as ground saturation could combine to make a flood possible. City forces would be notified by radio or other media that local weather conditions are expected which could cause flooding.

The Los Angeles County Sheriff or Fire Department would declare a flood alert situation. In addition the Fire Department would provide assistance in the placement of sandbags where personnel are available, and after higher priorities such as fire, rescue, medical aid, evacuation have been met.

The County Fire Department also has emergency response procedures (standard operating procedures) to guide the Fire Department in major disaster and emergency situations. For example, in the event of a major earthquake, the county dispatches their fire fighting units to conduct a visual check, then report back to the battalion for additional instructions.

APPENDICES



HISTORIC, CULTURAL AND PALEONTOLOGICAL RESOURCES



APPENDIX A HISTORIC, CULTURAL, AND PALEONTOLOGICAL RESOURCES

Patricia Jertberg conducted the record search and archival review at the Archaeological Information Center located at the University of California, Los Angeles on September 14 and September 21, 1992.

CA-LAN-44

CA-LAN-44 is located on the USGS *Malibu Beach* quadrangle on the north bank of Stokes Creek. It was recorded by Blackburn in 1961 and is described as an apparent village site largely buried by recent alluvium and cut by a drainage channel. Features and artifacts noted were hearths (encountered during construction), mortars and pestles. The site was revisited in 1975 by Frederick Briuer (L-582), who noted that the site boundaries could not be determined due to ground cover and alluvium deposits over the site. Briuer also noted that the midden was exposed in a erosion cut along Stokes Creek. Clay Singer reviewed the site area as part of a larger partial survey in 1991 (L-2612).

CA-LAN-129 AND -129A

CA-LAN-129 is located on the USGS *Calabasas* quadrangle, on a small hill east of Las Virgenes Road and south of the Ventura Freeway. The site was recorded in 1967 by Chester King. King estimated the site area to be 70 by 70 meters and described it as a possible multi-purpose gathering and processing site or base camp. A small spring was noted 100 meters east of the site area on the south side of the canyon. Several hundred artifacts were recorded on the surface, including manos, choppers, flake scrapers, knives, cores, flakes and hammerstones. Lithic material noted included quartzite, dacite, andesite, quartz, chert, siliceous siltstone, chalcedony and fused shale.

CA-LAN-129A was recorded by Clay Singer in 1976. CA-LAN-129A is located at the west end of an artificially flattened terrace, north of CA-LAN-129 and is separated from the terrace by a drainage. The site area, approximately 5 by 15 meters, is heavily disturbed and may be a remnant of a larger deposit or part of CA-LAN-129. Several flakes and cores of quartzite and andesite were observed at the west end of the graded terrace. Additional archaeological assessments have been conducted at CA-LAN-129 and CA-LAN-129A by M. Rosen in 1979 (L-531) and C. Singer in 1976 (L-935). In 1989, C. Singer (L-1877) conducted a test level investigation.

CA-LAN-153

CA-LAN-153 is located on the USGS *Malibu Beach* quadrangle and was recorded by William King in 1948. The site area is estimated to be 150 by 100 feet. King described it as situated on a knoll 300 feet northeast of CA-LAN-161 and as similar to CA-LAN-161, except that there were more artifactual materials on the surface. King indicated that it appeared to be a late site containing core tools, a steatite bowl fragment, flakes and marine shell. The site was excavated in 1977 and 1978 by Dr. Clement Meighan's UCLA field class (UCLA Acc. No. 605) and burials were recovered.

CA-LAN-154

CA-LAN-154 is located on the USGS *Malibu Beach* quadrangle on a knoll in a cleared area. A dirt road leading to the Stunt Ranch cuts through part of the site. The site was recorded in 1948 by William King who estimated the site area to be 150 by 175 feet. King noted that the site appeared to be a late site with indications of pockets of ash extending down the ridge to the west. Artifacts included mortar fragments, scrapers, chert flakes and shell.

CA-LAN-155

CA-LAN-155 was recorded in 1948 by William King and is located on the USGS *Malibu Beach* quadrangle in the area east and north of the house at Stunt Ranch. The 200 by 200 feet site area is described as extending on all side of the house, although subsurface deposit was not apparent. Artifacts listed included manos, metate fragments, patinated basalt cores, choppers and hammerstones, mostly of quartzite. King remarked that the site appeared to be of the LAN-1 (Tank Site) type that defined the Millingstone Horizon.

CA-LAN-156

CA-LAN-156 was recorded in 1948 by William King and is located on the USGS *Malibu Beach* quadrangle. It is described as situated on a low slope approximately 150 feet from an intermittent creek surrounded by oaks and 150 yards below CA-LAN-161. King described the site as an occupation site, although he also indicated that the site may be an accumulation of artifacts washed down from the knoll above. Artifacts present included a mano, scraper and core tools.

CA-LAN-161

CA-LAN-161 is located on the USGS *Malibu Beach* quadrangle and was recorded by William King in 1948. At that time the site location was described as just off the junction of the main ranch (Stunt Ranch) road and fire-road. The site was badly disturbed by the road cut. The site contained bedrock mortars in sandstone boulders with associated scrapers and cores.

CA-LAN-170

CA-LAN-170 is located on the USGS *Malibu Beach* quadrangle on the northwest side of Schuber Road, southwest of Cold Creek on Stunt Ranch. This site was recorded by William King in 1948. Artifacts noted included bowls, pestles and basket mortars; however, no other description of the site was noted except by reference to sites CA-LAN-153, -154, -155, -156 and -161.

CA-LAN-228

CA-LAN-228 is located on the USGS *Calabasas* quadrangle and was recorded in 1967 by C. King. King described the site as a 50 by 100 meter area located on the banks of the upper end of Stokes Canyon on a series of low terraces adjacent to a stream bed. The site record indicates that several areas of lithic scatters were present on both sides of the canyon containing quartzite and andesite flakes, a chert flake scraper and dacite mano. In 1967 the site area was disturbed by a dirt road and recent bulldozer activity. CA-LAN-228 was resurveyed in 1976 by Clay Singer (L-935) and in 1986 by Robert S. Brown (L-1654).

CA-LAN-229

CA-LAN-229 is located on the USGS *Malibu Beach* quadrangle and was recorded by T. Blackburn in 1961. The site area extends on the east and west side of Las Virgenes Road, south of Mulholland Highway. The site was described as a small site with shell in the midden, located on a stream terrace. Artifacts noted included small shell beads, scrapers, core tools, a pestle fragment and a large chipped "drill." The site record was updated by T. Blackburn and J. Bingham in 1976. The updated record indicated that the site area was 245 by 60 meters and extended on both sides of Las Virgenes Road.

Further archaeological investigations have been conducted at portions of CA-LAN-229 by Anonymous (L-24, 1975); Briuer (L-582, 1975); Cooley (L-672, 1979); C. King (L-101, 1982, L-2559, 1992); Chester King, Blackburn and Chandonet (L-2560, 1961); C. King, Bloomer, Clingen, Edberg, Gamble, Hammett, Johnson, Kempermen, Pierce and Wohlgemuth (1982); Meighan (L-338, 1984); Mark L. Raab (L-2510, -2078, 1990); John and Gwen Romani and Dan Larson (L-2449, n.d.); Singer (L-2612, 1991); and Robert J. Wlodarski (L-2563, 1992). All of the archaeological testing at CA-LAN-229 appears to have been conducted on the portion of the site located west of Las Virgenes Road.

Based on his archaeological investigations, Chester King identified CA-LAN-229 as the site of the historic village of *Talepop*. Whitley disputes the association of CA-LAN-229, although he refers to the site as CA-LAN-227, with the historic village of *Talepop* (1991:13). According to Whitley, the village of *Talepop* served as Manuel Ortega's headquarters for *Rancho Santa Gertrudis de las Virgenes*, and CA-LAN-229 is located two miles east of the land grant boundary (Whitley 1991).

CA-LAN-246

CA-LAN-246 is located on the USGS Canoga Park quadrangle in the northeastern portion of the project area. The site was recorded by Alex Apostolides in 1962 and a report submitted to the Southwest Museum. In 1963, Apostolides updated the site record and recovered burial remains from the site. The site area was estimated to be 300 by 100 yards, with a depth of four to five feet deep. The site was described as covering a northward sloping area between two drainages with a spring across the road to the southwest of the south end of the site. In 1963 the site had been disturbed by bulldozing activities, pothunting and dirt access roads.

Excavations at the site include a test trench dug by Peter Furst and a class from Valley State College in 1962 and removal of the burial in 1963. The artifact assemblage includes a point, bowl fragments, pestle fragments, mano fragments, core tools and flakes, shell and bone beads. Two steatite beads and one shell bead were recovered with the burial. Lithic material types noted include basalt, granitics, steatite and fused shale. A site report prepared in 1970 identified the occupation of this site with the late Prehistoric period based on the number of ornamental objects and stone tools in the artifact assemblage and the presence of deep midden and cemetery (Galdikas-Brindamour, L-2074, 1970). In 1978 the site area was bulldozed and is now entirely destroyed.

CA-LAN-315

CA-LAN-315 is located on the USGS *Calabasas* quadrangle south of Rondell Road. It was recorded by C. King in 1965 and described as a surface scatter of core and flake tools and handstones situated on a knoll. In 1981 a partial survey of an area that included this archaeological site did not record any information about it. Additional archaeological assessment reports including this site have been prepared by M. Rosen (L-531, 1979) and R. Pence (L-1146, 1980).

CA-LAN-420

CA-LAN-420 is located on the USGS *Calabasas* quadrangle near the junction of Las Virgenes Creek and the Ventura Freeway. It was recorded by King and Bard in 1970, and the site record was updated by Louis Tartaglia and Bob Wlodarski in 1981 (L-1007). In 1970 the site was described as flakes and shell, with midden, located on a knoll with the site area (100 by 300 feet) bisected east to west by a road. King and Bard suggested that it may have been a late period base camp. In 1981 Tartaglia and Wlodarski concurred with the earlier suggestion of the site representing a late period base camp, possibly with an earlier component. Surface and subsurface disturbance factors noted included discing, trash, grading and underground pipelines. The artifacts included flakes, hammerstones, core tools, ground stone and a sandstone bowl fragment. Lithic material types included quartzite, chert, fused shale and sandstone. The site was resurveyed by C. Singer in 1987 (L-1647). Further review of the site conditions was conducted several days during March, 1988, by Clay Singer. Limited mapping and the collection of six artifacts was conducted by Singer and Stunt Ranch docents at that time, and a test investigation was recommended. In May, 1988, CA-LAN-420 was destroyed.

CA-LAN-423

CA-LAN-423 is a 150 by 130 foot site located south of Old Topanga Canyon Road on the USGS *Malibu Beach* quadrangle. It was recorded by Mr. and Mrs. Don Gilbert, Ted Gutman and Mr. and Mrs. Barry Landau in 1970. Artifacts noted included a point, cores, chipping waste and hammerstones. One spot appeared to be a workshop area. The site was resurveyed by M. Rosen in 1979 (L-435) and by D. Bleitz and R. Salls (1989, L-1902).

CA-LAN-482

CA-LAN-482 is located south of the Ventura Freeway on the USGS *Calabasas* quadrangle. It was recorded in 1972 by P. Clarke, F. Overland and Fran Wasiewleski and was described as a 50 by 50 feet area situated on a knoll containing a sparse scatter of quartzite, chert and siltstone flakes, scrapers, hammerstones and choppers. CA-LAN-482 was within a larger area surveyed in 1976 by Clay Singer (L-935) but the site is not mentioned in the report.

CA-LAN-505

CA-LAN-505 is a cave site located south of Mulholland Highway and east of Cold Canyon Road on the USGS *Malibu Beach* quadrangle. The site was recorded by H. E. Hanks in 1971 and described as completely dug out. Basketry fragments of three different baskets were found by local boys. The basketry fragments were photographed and analyzed by Charles Rozaire at the Los Angeles County Museum and were returned to the boy who found them. One steatite dish, one haliotis shell and one large gastropod were also noted at the site.

CA-LAN-506

CA-LAN-506 is a bedrock mortar site located east of Thornhill and south of Cold Creek in Monte Nido on the USGS *Malibu Beach* quadrangle. The site was recorded in 1971 by H. E. Hanks and described as "two groups of three and two". The description is open to interpretation, but it sounds like they meant two bedrocks; one with three mortars and one with two. The site record indicates that only a cursory examination of the site area was made and no other artifacts were noted.

CA-LAN-654

CA-LAN-654 is located east of Las Virgenes Road and south of Mulholland Highway on the USGS *Malibu Beach* quadrangle. The site was recorded in 1975 by Frederick Briuer (L-582) as a result of an archaeological survey of a larger area. The 100 by 100 feet site area was described as a surface scatter of flakes and a mano found around an old oak tree. The site record indicated that several of the artifacts were in association with ground squirrel backdirt, which might indicate the presence of subsurface deposit. Additional archaeological surveys of this site have been conducted by J. Romani (L-1170, 1982), C. Singer and J. Atwood (L-2612, 1991), and K. Steele and A. Gallardo (L-2409, 1982).

CA-LAN-669

CA-LAN-669 is located north of the Ventura Freeway and east of Las Virgenes Canyon on the USGS *Calabasas* quadrangle. The site was recorded by Richard Wessel during an archaeological survey of the Ahmanson Ranch conducted in 1976 (L-868). It was described as an extensive surface scatter of artifacts distributed over two knoll tops and around a running spring encompassing an area of 40,000 square meters.

Three quartzite flakes and shellfish remains were recorded around the spring, and five quartzite flakes and two core fragments were recorded southeast of the spring on a low bench. The most abundant surface artifacts were found to the south of the bench mentioned above, on a large knoll. A scatter of flakes covers the entire knoll, although there were three spatially distinct assemblages: (1) eastern side contained quartzite and metavolcanic tools, (2) the center contained primarily flakes and dispersed scatter of burnt siltstone, and (3) the remains of a probable hearth and stone bowl fragment were present on the western side.

Lithic materials noted included fused shale, chert, quartzite and metavolcanics. Based on the presence of fused shale, an occupation period dating from the Middle Period was proposed by Wessel. Wessel also suggested that CA-LAN-669, -669A and -420 may represent a complex of functionally related sites. A test excavation at CA-LAN-669 was conducted by D. M. Van Horn in 1981 (L-1008).

CA-LAN-669A

CA-LAN-669A is located north of the Ventura Freeway and approximately three-fourths of a mile east of CA-LAN-669 on the USGS *Calabasas* quadrangle. It was recorded during the 1976 Wessel survey discussed above (L-868) and is described as a 50 square meter area containing three quartzite flakes and one unifacial granitic mano. Wessel suggested that it was a gathering site associated with CA-LAN-669 and CA-LAN-420.

CA-LAN-711

CA-LAN-711 is located west of Old Topanga Canyon Road and south of Mulholland Drive on the USGS *Calabasas* quadrangle. This site was recorded in 1975 by J. M. Farrar and was described as situated on a knoll, lower than the one on which CA-LAN-712 is located. The site was estimated to be a 100 by 50 feet area containing a scatter of artifacts that included cores and flakes. R. J. Wlodarski updated the site record in 1979 and considered CA-LAN-711 to be an extension of CA-LAN-712, discussed below. Further archaeological surveys were conducted at this site by Terry Malone (L-976, 1979) and R. Pence (L-1199, 1979). David Whitley (L-1963, 1979), and R. Desautels (L-2566, 1979) conducted test excavations and Jeannie Villanueva (1979, L-1002) conducted a salvage excavation.

CA-LAN-712

CA-LAN-712 is located west of Old Topanga Canyon Road and south of Mulholland Drive on the USGS *Calabasas* quadrangle. The site was recorded by J. M. Farrar in 1975 at the same time he recorded CA-LAN-711. He described the site as a 300 by 150 feet area situated on a prominent knoll south of, and higher than, CA-LAN-711. Farrar listed core hammerstones, cores and chert flakes as artifacts found on the surface.

Whitley's updated site record combines CA-LAN-711 with CA-LAN-712 and extends the site area to the west. He estimated the site area to be 60 by 250 meters. The artifact assemblage recorded by Whitley includes white and banded chert flakes, chert cores,

scraper planes, numerous manos and a possible metate fragment. No fused shale was noted and Whitley posited a possible Millingstone Horizon or Middle Period site based on preliminary analysis. Further archaeological surveys were conducted at this site by Terry Malone (L-976, 1979) and R. Pence (L-1199, 1979). David Whitley (L-1963, 1979) and Desautels (L-2566, 1979) conducted test excavations and Jeannie Villanueva (1979, L-1002) conducted salvage excavations at this site.

CA-LAN-719

CA-LAN-719 is located on a ridge overlooking Stokes Creek north of Mulholland Highway on the USGS *Malibu Beach* quadrangle. The site was recorded by R. Pence in 1977 (L-2082) and is described as a small (4 by 5 meters) food processing station with a flake scatter, one unifacial mano and no apparent midden. According to the site record, the site was destroyed by a fire road. Ted Cooley conducted an archaeological assessment of CA-LAN-719 in 1979 (L-672).

CA-LAN-760A and -760B

CA-LAN-760A and CA-LAN-760B are located south of the Ventura Freeway and east of Las Virgenes Road on the USGS *Calabasas* quadrangle. The site was recorded in 1977 by N. Leonard and is described as two middens, one located at a low point in a saddle on the ridge, the other to the south on a slope overlooking arroyo. The northern component size was estimated to be 50 by 30 meters and the southern, 50 by 50 meters. A dirt access road had disturbed the site surface. A historic wood frame structure was noted on the southern component and historic trash, including square nails, bottle glass and porcelain, was dumped on the steep slope. Prehistoric artifacts noted were fused shale flakes, a bone awl, a knife, flake scrapers, a projectile point mid-section and hammerstones.

CA-LAN-785

CA-LAN-785 is located south of Piuma Road on the USGS *Malibu Beach* quadrangle and was recorded in 1977 by F. Bove and B. Dillon. The site is described as a 100 by 50 meter area containing one and possibly two bedrock mortars. No midden or other artifacts were recorded.

CA-LAN-836

CA-LAN-836 is located south of the Ventura Freeway and on the north side of McCoy Canyon on the USGS *Calabasas* quadrangle. The site was recorded by G. DeGarmo in 1976 (L-172) and described as a quarry site on an eroding conglomerate. The artifacts noted included cracked cobbles, anvils and primary and secondary flakes. Few tools were present. A further archaeological assessment was conducted by J. Prince (L-2088, 1976).

CA-LAN-866

CA-LAN-866 is located south of the Ventura Freeway at the head of McCoy Canyon on the USGS *Calabasas* quadrangle. Clay Singer recorded the site in 1976 (L-935) as a result of a larger survey. The site is described as a 20 by 20 meter area situated in a low saddle. The record indicates the surface scatter included two manos and one metate.

CA-LAN-867

CA-LAN-867 is located on the USGS *Calabasas* quadrangle south of the Ventura Freeway, in the same vicinity as CA-LAN-836 and CA-LAN-866, and was recorded by Clay Singer during the survey discussed above (L-935). The 25 by 25 meter area is described as a scattering of lithic artifacts situated on a small flat terrace above a dry streambed probably representing a small hunting camp. The artifacts noted included chert flakes, a quartzite flake scraper and two fused shale projectile points. The site record indicated that the projectile point style is associated with the later period Chumash circa 1200-1500 AD.

CA-LAN-868

CA-LAN-868 is located on a small ridge west of Cold Canyon Road on the USGS Calabasas quadrangle. The site was recorded in 1976 by C. Singer (L-935) and was described as a 10 by 20 meter area heavily disturbed by grading and a dirt road. One quartzite chopper and one heavily weathered sandstone metate were recorded on the ridge. Singer indicates it was probably a sage (Salvia) gathering station. CA-LAN-868 was part of another archaeological assessment conducted by R. Brown in 1986 (L-1654).

CA-LAN-892

CA-LAN-892 is located on a low terrace west of Las Virgenes Road and south of the Los Angeles/Ventura County line on the USGS *Calabasas* quadrangle. The site was recorded by C. Singer in 1978 (L-381) during a partial cultural resource survey of a 540 acre parcel and is one of four recorded during the effort. The 20 by 20 meter site area was described as disturbed by cattle grazing, although only 10 percent of the ground surface was visible. One burned granite bifacial mano and one sandstone basin metate fragment were observed on the surface about 20 meters apart.

CA-LAN-893

CA-LAN-893 is located on the south side of a canyon west of Las Virgenes Road and south of the Los Angeles/Ventura County line on the USGS *Calabasas* quadrangle. The site was recorded by C. Singer in 1978 (L-381) as part of the survey discussed above. The site area was described as a 20 by 50 meter surface scatter of lithic artifacts, with some apparent depth, situated on the east slope of a terrace saddle. The site was disturbed by an east-west dirt road. Artifacts recorded included quartzite flakes, flake tools, core fragments, blades, a blade knife, a scraper, a hammerstone, a chopper and a

siltstone cobble bar fragment. Lithic materials were predominantly quartzite but also included siltstone, schist, chert and chalcedony. The site record also noted that surface visibility was limited due to dense vegetation and that the site boundaries were tentative. Singer recommended archaeological testing.

CA-LAN-894

CA-LAN-894 is located in the same general vicinity as CA-LAN-892 and CA-LAN-893 on the USGS *Calabasas* quadrangle. The site was recorded in 1978 by C. Singer as part of the survey discussed under CA-LAN-892. The 10 by 20 meter site area is situated on a very small terrace on the south side of a canyon which drains into Las Virgenes Canyon from the west, and is northeast of CA-LAN-893 and west of CA-LAN-895. Artifacts noted were one unifacial rhyolite mano and one quartzite flake.

CA-LAN-895

CA-LAN-895 is located on a high terrace in the vicinity of CA-LAN-893 and CA-LAN-894 on the USGS *Calabasas* quadrangle and was recorded in 1978 by C. Singer (see CA-LAN-892). The site area is estimated to be 50 by 50 meters and included quartzite flakes, a rhyolite flake and several broken quartzite cobbles. On the site record, Singer recommended testing, although no indication of midden was noted.

CA-LAN-969H

CA-LAN-969H is located east of Chesebro Road and north of the Ventura Freeway on the USGS *Calabasas* quadrangle. The 50 by 50 meter site area was recorded in 1978 by W. Breece, S. Hunter and T. Schuster and is described as two abandoned historic structures. The structures included one ranch house and an adjacent outbuilding constructed of wood and severely deteriorated. The exposed base of the ranch house chimney appeared to contain some adobe. The site record indicates that the buildings dated to at least 1900 and that the ranch belonged to John W. Morrison. Additional historical research was conducted during surveys in 1982 by John Foster (L-1142) and K. Kelly, R. Fraser and G. Devlaminick (L-1841, 1989).

CA-LAN-973

CA-LAN-973 is located east of Chesebro Road and north of the Ventura Freeway on the USGS *Calabasas* quadrangle. The site was recorded in June 1978 by W. Breece, S. Hunter, T. Schuster and updated by Breece in November, 1978. The site was described as a 40 by 30 meter surface scatter of lithics situated in a pasture on knoll overlooking a seasonal stream. The artifacts listed included one mano, one chopper and 37 flakes. Faunal material included four pieces of shell and one small mammal bone. Breece excavated three 1 by 1 meter units and determined that there was no subsurface deposit present. All artifactual materials were collected. Additional archaeological surveys were conducted by J. Foster (L-1308, 1983) and K. Kelly, R. Fraser and G. Devlaminick (L-1841, 1989).

CA-LAN-1013

CA-LAN-1013 is located south of Old Topanga Canyon Road in the northeastern portion of USGS *Malibu Beach* quadrangle. The site was recorded in 1979 by M. Rosen, K. Pedrick, S. Hector, N. Gauzewitz and S. Handy. The record describes the site as a 15 by 5 meter lithic scatter situated in a ridgeline saddle. A total of 315 artifacts were collected from the site, including chert and quartzite flakes, some utilized; one chert biface fragment; one fused shale projectile point and some andesite/rhyolite flakes. The site was resurveyed by M. Rosen (L-435, 1979) and by D. Bleitz and R. Salls in 1989 (L-1902).

CA-LAN-1052

CA-LAN-1052 is located on a small knoll above Stokes Creek, north of Mulholland Highway and south of Stokes Canyon Road on the USGS *Malibu Beach* quadrangle. It was recorded by T. Cooley in 1979 (L-672) and was described as a 20 by 20 meter scatter of chipped stone materials distributed between sagebrush clumps. Artifacts noted included three cores, two hammerstones and a number of quartzite flakes. The depth of the deposit was estimated to be less than 20 centimeters.

CA-LAN-1053

CA-LAN-1053 is located northeast of CA-LAN-1052 at the confluence of Stokes Creek and a small unnamed drainage on the USGS *Malibu Beach* quadrangle. It was recorded by T. Cooley (L-672, 1979) as part of the survey discussed above. The site was described as a 10 by 15 meter area containing a dark deposit with numerous fire-cracked rock and some chipping debris and burned bone. The depth of the deposit was estimated to be at least 30 centimeters. Artifacts noted included a core/scraper plane, chert and quartzite chipping debris and burned bone. Possible rock cluster/hearth features were also noted.

CA-LAN-1060

CA-LAN-1060 is located south of the Ventura Freeway and west of Old Topanga Canyon Road on the USGS *Calabasas* quadrangle. The site was recorded in 1980 by M. Cottrell (L-681) and was described as a 50 by 100 area Millingstone camp site containing manos, flakes and fire-cracked rock. Archaeological testing was conducted at the site by M. Cottrell in 1981 (L-955). As a result of the test, Cottrell placed the occupation period of the site to be within the period 1500 B.C. to A.D. 500.

CA-LAN-1127

CA-LAN-1127 is located south of the Ventura Freeway and west of Mulholland Highway on the USGS *Calabasas* quadrangle. It was recorded in 1982 by B. Padon and B. Wlodarski (L-1203). The site was described as 50 by 20 meter open air habitation site on top of a small knoll. Site disturbance features described included seasonal discing, erosional run-off and sewer line. Artifacts noted included one sandstone bifacial mano,

two quartzite cores, four chalcedony waster flakes, two chalcedony utilized flakes, one chert utilized flake, nine chert non-utilized flakes, eleven chert waste flakes, two chert utilized cores, six quartzite waste flakes, five quartzite non-utilized flakes, two quartzite utilized flakes, and one quartzite hammerstone, for a total of 46 artifacts. One mano, one quartzite core and five flakes were collected and curated at UCLA Museum of Cultural History.

CA-LAN-1133

CA-LAN-1133 is located on a small knoll south of Mulholland Highway and east of Canyon Drive on the USGS *Calabasas* quadrangle. It was recorded in 1983 by C. Singer and was described as a 30 by 50 meter surface scatter of artifacts. Artifacts noted included core fragments, flakes, a quartz crystal and one burnt fragment of worked bone. Lithic materials included chert, quartzite, andesite, felsite, fused shale, basalt and quartz. Disturbances noted included horse and foot trails across the site area.

CA-LAN-1135

CA-LAN-1135 is located east of Mulholland Highway and south of Canyon Drive on the USGS *Calabasas* quadrangle. It was recorded in 1984 by C. Robert and was described as a 16 by 16 meter surface scatter of artifacts, approximately 15 artifacts per square meter. Artifacts noted included cores, tools, waste flakes, chert blades, manos and a handaxe. In 1990 the site record was updated by G. Romani and J. Sanfilippo (L-2132) to include two loci: A and B. Locus A was described as a 120 by 60 meter area containing a sandstone pestle, one sandstone mano fragment, some quartzite cores, one basalt core, one chalcedony core, one quartz core and numerous quartzite flakes, and lesser amounts of quartz, basalt, chert and chalcedony flakes. Locus B was described as a 110 by 45 meter area containing mainly quartzite flakes with some basalt and chert flakes. Both loci have been subjected to erosion; however, a 10 to 70 centimeter subsurface deposit was estimated in non-eroded areas of soil.

CA-LAN-1218

CA-LAN-1218 is located east of Mulholland Highway and north of the junction of Mulholland and Cold Creek Canyon Road on the USGS *Malibu Beach* quadrangle. The site was recorded by B. Dillon in 1985 (L-1474) and described as a probable hunting camp or temporary butchering site. The area was estimated as a 65 by 75 meter surface scatter of lithic artifacts and debitage with some modified animal bone. The site record indicates that 50 surface artifacts were collected and curated at UCLA Museum of Cultural History. The list of artifacts included cores, scrapers, choppers, shatter and secondary flakes, and one fused shale biface fragment. Lithic materials included fused shale, andesite, chert, quartzite, chalcedony and basalt. Also present were three broken deer bone fragments. The site integrity was noted to be good with little disturbance.

Additional archaeological investigations were conducted at CA-LAN-1218 by B. Dillon (L-1539, 1986) and G. Gumerman, J. Simon and D. Whitley (L-1900, 1989). B. Dillon conducted a surface collection and J. Simon and D. Whitley, a survey.

CA-LAN-1248

CA-LAN-1248 is located west of Topanga Canyon Boulevard, between the confluence of Topanga Canyon Creek and a small tributary on the USGS Canoga Park quadrangle. It was recorded in 1985 by L. Gamble, C. King and D. Larson and described as an open air site representing a probable Early Period settlement similar to the Tank site, LAN-1. The site area was estimated to be 75 by 60 meters and contained a dense concentration of manos, metate fragments, scrapers, flakes and hammerstones; mortars and pestles were absent. Lithic materials noted included quartzite, sandstone, chert and fused shale. Firecracked rocks were also present. Further archaeological review of CA-LAN-1248 was conducted by B. Padon (L-1497, 1986). B. Dillon (L-1537, 1986) conducted a test excavation and an ethnobotanical study was conducted by G. Gumerman in 1986 (L-1710).

The site record was again updated in 1991 by L. Gamble and C. King; and the estimated site area expanded to 160 by 150 meters, based on artifacts identified beyond the original site boundaries recorded in 1986.

CA-LAN-1262

CA-LAN-1262 is a rockshelter located south of Mulholland Highway, east of Cold Canyon Road and west of Schueren Road on the USGS *Malibu Beach* quadrangle. The rockshelter was recorded in 1986 by M. Sampson and described as a well-concealed north facing rockshelter, 8.5 meters wide and 3 meters deep. An area of definable midden was noted around the hearth remains. Other associated artifacts reported included quartzite flakes and cores, one consolidated sandstone mano, a hearth and one bedrock mortar.

CA-LAN-1325

CA-LAN-1325 is located on a narrow ridge northwest of the intersection of Old Topanga Road and Mulholland Highway on the USGS *Calabasas* quadrangle. The site was recorded in 1986 by J. Atwood and F. McDowell and is described as a 85 by 30 meter area of surface artifacts exposed in a fire road, with the heaviest concentration in the eastern portion. Artifacts noted included one mano, three mano fragments, two quartzite angular hammers, cores and flakes of quartzite, basalt and felsite. Subsequent archaeological testing was conducted by M. Raab, V. Howard and R. Wessel (L-242, 1987); and another survey was conducted by R. Jenkins (L-2349, 1988).

CA-LAN-1342

CA-LAN-1342 is located in a disced field southeast of the junction of Old Topanga Canyon Road and Cold Creek Road/Mulholland Highway on the USGS *Calabasas* quadrangle. The site was recorded in 1987 by C. Singer and J. Atwood (L-1685) and was described as a 100 by 40 meter surface concentration of flake tools and cores. Artifacts recorded included large flake tools of quartzite, felsite and basalt, and a tarring pebble in eight pieces. The depth of the site was undetermined.

CA-LAN-1423

CA-LAN-1423 is located on a saddle between two knolls, south of the Los Angeles City boundary and east of Topanga Canyon Boulevard on the USGS Canoga Park quadrangle. It was recorded in 1988 by C. King, D. Larson, L. Gable, B. Bates, D. Huntley and K. Huntley and described as a 100 by 30 meter open air site with chipped stone across the surface. Artifacts noted included a minimum of eighteen basalt flakes, nine monterey chert flakes, two volcanic flakes, two quartzite flakes and two andesite flakes. The site integrity was noted to be good except for a dirt roads that cross the site.

Subsequent archaeological investigations, including an evaluation and test excavation, were conducted by M. Raab (L-258, 1988; L-1929, 1989).

CA-LAN-1424

CA-LAN-1424 is located south of CA-LAN-1423, in the same general vicinity, on the USGS Canoga Park quadrangle. It was recorded in 1988 by C. King, L. Gamble, D. Larson, B. Bates, D. Huntley and K. Huntley and was described as an open air site, approximately 350 by 75 meters in area, based on surface distribution of artifacts which included three loci of concentration. Locus 1 contained a concentration of chert flakes in dark midden soil; Locus 2 contained a concentration of heavily patinated basalt artifacts including hammerstones; and Locus 3 contained a high concentration of basalt flakes, cores and other artifacts. Specific artifacts noted included flakes, an abrader, a scraper, cores, manos, hammerstone fragments, a sandstone mortar fragment and fire altered rock.

The site was evaluated by M. Raab (L-258, 1988) and the site record was updated in 1989 by R. Salls and J. Budd during a test level investigation. The updated site record indicates that the actual site is Locus 3 and is 40 by 20 meters in area. Locus 1 could not be relocated and Locus 2 appears to be a secondary deposit or was destroyed. Artifacts noted on the updated site record included a bedrock mortar on a small stone outcrop and numerous bifacial manos, metate fragments and core tools. Test excavations were conducted at this site by M. Raab and R. Salls (L-1929, 1989; L-2092, 1990).

CA-LAN-158

CA-LAN-1580 is located north of the Ventura Freeway, east of Chesebro Road on the USGS *Calabasas* quadrangle. The site was recorded in 1989 by K. Kelly (L-1841) and described as a 74 by 29 meter surface scatter of artifacts in burned soil. Artifacts noted included four manos, three cores, two core scrapers, one scraper plane, one core chopper and chert, quartzite and fused shale debitage. Except for a dirt road that crosses the site, the remaining site integrity appears good. CA-LAN-1580 was resurveyed by J. McKenna in 1989 (L-2021).

CA-LAN-1581

CA-LAN-1581 is located in the same general vicinity as CA-LAN-1580 on the USGS *Calabasas* quadrangle. The site was recorded in 1989 by K. Kelly as part of the above project (L-1841). CA-LAN-1851 is described on the site record as a large, probable habitation site on a flat terrace adjacent to Cheseboro Creek channel. The site area was estimated to be 116 by 86 meters and included a surface scatter of four manos, one chopper, one scraper, one scraper plane, three cores, one core/scraper/hammerstone and chert, quartzite, siltstone, basalt, fused shale utilized flakes, and debitage. One piece of burned bone was also noted. The site integrity appeared fair.

CA-LAN-1852

CA-LAN-1852 is located north of CA-LAN-1850 and CA-LAN-1851 on the USGS *Calabasas* quadrangle. It was recorded by K. Kelly in 1989 (L-1841) as part of the survey discussed above. The site is described on the record as a 20 by 20 meter sparse surface scatter of artifacts in midden soil. Depth of the midden soil was undetermined. Artifacts noted include a fire-cracked mano and several pieces of debitage.

CA-LAN-1883

CA-LAN-1883 is located south of the Ventura Freeway and east of Las Virgenes Road on the USGS *Calabasas* quadrangle. The site was recorded during a 1991 Phase I survey of 980 acres (L-2280) for Micor Ventures by B. Gothar, J. Simon and D. Whitley. The site record describes CA-LAN-1883 as a 35 by 50 meter surface scatter, possible campsite, of artifacts situated on a ridge overlooking Las Virgenes Canyon. Artifacts noted included four manos, two metates, one bowl and approximately 150 flakes. Lithic materials included quartzite, chert, chalcedony and fused shale.

CA-LAN-1884

CA-LAN-1884 is located southwest, but in the same general vicinity, of CA-LAN-1883 on the USGS *Calabasas* quadrangle. The site was recorded in 1991 by B. Gothar, J. Simon and D. Whitley during the survey discussed above (L-2280). The site record indicates the site is a 30 by 200 meter lithic scatter and possible plant processing locale on a ridgeline. Artifacts noted included one hammerstone, two unifacial choppers, two quartzite cores, one scraper plane and approximately 15 quartzite flakes. Additional archaeological testing was conducted by B. Gothar, J. Simon and D. Whitley (L-2596, 1992) and the site record updated. The updated site record indicates that the site dates to the Middle Horizon, based on projectile point styles and that there was no subsurface deposit. Additional artifacts recovered during the test were 44 pieces of debitage, three core/cobble tools and five flaked stone tools. The record indicates that the site was completely salvaged as a result of the testing. The revised site area was given as 32 by 92 meters.

CA-LAN-1885

CA-LAN-1885 is located north of, and in the same general area as, CA-LAN-1883 and CA-LAN-1884 on the USGS *Calabasas* quadrangle. The site was recorded in 1991 by the same archaeologists and under the same project as discussed under CA-LAN-1883 (L-2280). The site is situated on a ridgeline and encompasses a 25 by 40 meter surface scatter of lithic artifacts. The artifacts noted included four quartzite flakes and two chert flakes. No depth of deposit was noted and the site record indicated that the integrity was good.

CA-LAN-1886

CA-LAN-1886 is located southeast of the above sites on the USGS *Calabasas* quadrangle. The site was recorded in 1991 by the same archaeologists and on the same project as the above three sites (L-2280). The site is situated at the headwaters of a small ephemeral drainage, tributary to Stokes Canyon; and an old spring appears to be present on the site. It is described as a 200 by 100 meter small habitation site with midden and bedrock mortars. Features noted included two bedrock mortar locations with one containing three possible cupules. Artifacts noted include approximately 25 quartzite flakes and a small number of chert flakes. Non-artifactual constituents included possible midden soil and four pieces of shell.

Additional archaeological testing was conducted by B. Gothar, J. Simon and D. Whitley (L-2596, 1992) and the site record updated. The updated site record indicates that the site is a small habitation site with midden and bedrock mortars consisting of four loci. Locus A, on west ridge, contains small midden (maximum depth 30 centimeters); Locus B, at the spring and on the interfluve, contains surface scatter and bedrock mortar; Locus C, on east bench on west stream, contains a surface scatter; and Locus D, on east ridge, contains a surface scatter and bedrock mortar. The artifacts recovered indicate an occupation date of ca. A.D. 700 - 1770, or late Middle/Late Horizon. As a result of the test investigation, the site area was revised to: Locus A - 50 by 15 meters; Locus B - 25 by 10 meters; Locus C - 15 by 10 meters; and Locus D - 25 by 10 meters. Integrity at Locus A is described as fair/poor due to impact from the dirt road. Loci B, C and D were completely salvaged during the test.

CA-LAN-1887

CA-LAN-1887, the fifth and southernmost of the five sites, is located in the same vicinity on the USGS *Calabasas and Malibu Beach* quadrangle and was recorded in 1991 by the same archaeologists and on the same project as the above four sites (L-2280). The site is described as a 60 by 15 meter lithic scatter/plant processing locale on a low narrow ridge. No depth is indicated. Artifacts noted included two quartzite scraper planes and six quartzite flakes.

Additional archaeological testing was conducted by B. Gothar, J. Simon and D. Whitley (L-2596, 1992) and the site record updated. The updated site record indicates the site area is a 54 by 60 meter small lithic scatter/hunting locale. Projectile points date from

A.D. 500 to after A.D. 1200 of late Middle/Late Horizon in age. Midden depth was 30 centimeters in a restricted colluvial area. The remainder of the site did not contain a subsurface deposit. Additional artifacts recovered included four flake tools, three projectile points and 35 pieces of debitage. The surface component was salvaged as a result of the test. The colluvial deposit is intact and in good condition.

CA-LAN-2059

CA-LAN-2059 is located on a stream terrace, north of Cold Creek on the USGS *Malibu Beach* quadrangle. It was recorded in 1992 by Atwood, Gomes and Knight and described as a bedrock mortar buried beneath alluvial soils about 20 plus centimeters below the present surface. It was relocated by a local property owner who remembered its location. No site area was determined.

CA-LAN-2060H

CA-LAN-2060H is located east of Cold Canyon Road and west of Schueren Road on the USGS *Malibu Beach* quadrangle. The site was recorded in 1992 by Atwood, Gomes and Knight and described as historic 1920s - 1930s cabin foundations owned by the Blesser family. The remaining foundations are limited to a small area around a crude stone and brick chimney. The chimney is reinforced with concrete and metal wire and is slumping. The cabin burned down some time in the recent past and burned household and construction materials are still present on the site. The site area is estimated at 5.5 by 5 meters. The red bricks contain a maker's mark, "LABCo." Remains of a 1974 stone bridge and dam are across Cold Creek, north of the cabin.

CA-LAN-2061H

CA-LAN-2061H is located south of Cold Creek on a stream terrace on the USGS *Malibu Beach* quadrangle. It was recorded by Atwood, Gomes and Knight in 1992 and described as a depression era peat moss extraction area, according to local informants. The site is noted to be composed of a well-made red brick BBQ oven in a leveled area, with red brick pilings and steel cables used to construct a bridge across the creek.

CA-LAN-2062H

CA-LAN-2062H is located east of Cold Canyon Road and west of Schueren Road along Cold Creek on the USGS *Malibu Beach* quadrangle. The site was recorded by Atwood, Gomes and Knight in 1992 and described as a cement house pad with an associated cobble stone wall edging along the base of the hill to the south, and wooden stairs leading up from the creek. The garden areas are terraced with cobblestones along the east edge of the lot. Steel cables, the remains of a suspension bridge across the creek, are still attached to nearby trees and span to one remaining piling in the creek bed. Building rubble to the south of the existing cement pad may indicate the location of another cabin. The area is 25 by 25 meters. The house was burned down. Local informants said the McKain Camp originally had three structures and that the owners were distilling "moonshine" here during prohibition.

CA-LAN-2063

CA-LAN-2063 is located adjacent to Cold Creek southeast of the intersection of Cold Canyon Road and Mulholland Highway. The site was recorded in 1992 by King, Gamble, Atwood, Gomes and Knight and described as two bedrock mortars and a lithic deposit on a small grassy stream terrace. The site area indicated is 50 by 50 meters, with undetermined depth. Artifacts noted included two basalt flakes, one fused shale flake, one chert flake, one quartzite scraper and one chert scraper. One piece of burned bone was also noted. The record indicates that the site integrity appears to be good and a portion may be buried under recent colluvium. Dark soil was observed in anthills and along the trail crossing the lower part of the terrace.

CA-LAN-2064

CA-LAN-2064 is a rockshelter located on a steep hillside north of Cold Creek on the USGS *Malibu Beach* quadrangle. It was recorded in 1992 by Atwood, Gomes and Knight. The shelter is 7.5 by 4.5 meters, is composed of weathered sandstone and has three chambers. A bedrock mortar hole is located at the entrance. Artifacts noted included one Monterey chert retouched flake found on the talus slope below the entrance to the shelter. No midden deposit was noted.

CA-LAN-2065H

CA-LAN-2065H is located west of Schueren Road and south of Mulholland Highway on the USGS *Malibu Beach* quadrangle. The site was recorded in 1992 by Atwood, Gomes and Knight and is described as historic 1920s cabin foundations, including a stone chimney and a hand dug water well. The cabin was built in the early 1920s by Mr. Ralph Hamlin and was used by his family as a vacation home. The cabin was subsequently owned by the Barham family and burned down some time prior to 1965. The area is filled with recent and historic debris. According to the Helseleys (current owners), the cabin's original builder Ralph Hamlin was an influential man in Los Angeles.

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BIOLOGICAL RESOURCES



APPENDIX B BIOLOGICAL RESOURCES

LSA Associates, Inc. conducted an archival research of the biological resources of Calabasas. This work was done as part of the environmental documentation for the General Plan being prepared by the City. LSA also prepared a habitat map based on the interpretation of aerial photos and the information provided from the documentation review.

DEFINITIONS OF LEGAL STATUS CATEGORIES FOR SENSITIVE BIOLOGICAL ELEMENTS

Sensitive species are those plants and animals occurring or potentially occurring on the project site which are endangered, threatened, rare or declining rapidly at a local, regional, State or national level. Legal protection for these species varies widely, from the comprehensive protection extended to federally endangered species to no legal status at present.

Federal Categories

There are five categories of federal listings:

- Listed Endangered
- Listed Threatened
- Proposed as Endangered
- Proposed as Threatened
- Category 1 Candidate for Listing.

The U.S. Fish and Wildlife Service has determined that species in the "Proposed" categories meet requirements similar to those for listed threatened/endangered species. Three classes of candidates for federal status are used, as explained below.

The Category 1 Candidate category is defined as including species "for which the Service presently has substantial information on hand to support the biological appropriateness of proposing to list as endangered or threatened" (USFWS, 1989, p. 554).

The Category 2 Candidate category "comprises taxa for which information now in possession of the Service indicates that proposing to list as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threat are not currently available to support proposed rules" (USFWS, 1989, p. 554). In other words, further studies may support a finding that the species should be classified as threatened/endangered.

Category 3 includes species previously considered to be candidates for listing, but which are being dropped from further consideration. The three subcategories of Category 3 include species no longer considered to be valid taxa, species found to be too common and widespread to warrant listing, and species presumed to be extinct.

State Categories

There are four categories of State listings:

- Endangered
- Threatened
- Rare
- Candidate for Threatened or Endangered.

The first two are equivalent to the federal endangered and threatened definitions, and the "Rare" classification is defined in a similar manner as "Threatened" warrant consideration under CEQA per the CEQA definition. The fourth category is equivalent to Category 1 Candidate in the federal system.

CNPS Categories

The California Native Plant Society (CNPS) has four basic categories of listed plants: 1) plants of the highest priority, which is divided into subcategories of plants that are presumed extinct in California (1A) and plants that are rare and endangered in California and elsewhere (1B); 2) plants which are rare and endangered in California but more common elsewhere; 3) plants about which more information is needed; and 4) a "watch list" of plants of limited distribution.

Sensitive Habitats

Sensitive habitats are plant communities of special value to the local ecosystem. Impacts to these habitats may be found to be significant under CEQA and/or by local agencies. Regulatory status of sensitive habitats is not presented in tabular form, since this information is often not readily summarized in this manner.

REVIEW OF DOCUMENTATION

LSA reviewed the following documents supplied by the City of Calabasas for information on biological resources:

- Ahmanson Ranch Specific Plan
- Malibu/Santa Monica Mountains Area Planning Program

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- Calabasas Promenade Final Environmental Impact Report
- Shopping Center Northwest Corner, Las Virgenes Road/Lost Hills Road
 Supplemental Environmental Impact Report
- The Enclave at Calabasas Draft Environmental Impact Report
- City of Calabasas California State Polytechnic University class project
- Calabasas Park West Draft Environmental Impact Report
- The Enclave at Calabasas Final Environmental Impact Report

The information provided by these documents varied from highly detailed maps and text information as in The Enclave at Calabasas environmental documents to no biological resources for the shopping center project.

Other documents included local references such as *The Flora of the Santa Monica Mountains* (Raven, et al., 1986), *A Flora of Southern California* (Munz, 1974) and other standard references and species lists.

SENSITIVE SPECIES

The following descriptions of sensitive plant species were taken from Munz (1974), the reptile species from Stebbins (1985), the bird species from Garrett and Dunn (1981), and the mammal species from Hall (1981). Information from documents prepared by Impact Sciences (1982a, 1982b) was also used. The plant community descriptions were taken from Raven, et al. (1986). It should be noted that the following species are not necessarily found in Calabasas; rather, the Calabasas General Plan study area contains habitats that could potentially be utilized by the individual sensitive species. If development were to be proposed in areas of suitable habitat, the presence or absence of the sensitive species would be determined at that time.

San Fernando Valley Spineflower (Chorizanthe parryi var. fernandina)

San Fernando Valley spineflower is a Category 1 candidate species and is on the CNPS List 1A. It may be extinct. Its historical habitat extended from the San Fernando Valley to Orange County and Del Mar in San Diego County. It is recorded from the Santa Susana Mountains near Chatsworth.

San Fernando Valley spineflower grows in dry sandy places below 2,500 feet, mostly in the coastal sage scrub habitat in the Calabasas General Plan study area. It is an annual that blooms between April and June.

Santa Monica Mountains Dudleya (Dudleya cymosa marcescens)

Santa Monica Mountains dudleya is a Category 2 candidate species and is on the CNPS List 1B. It is endemic to Little Sycamore Canyon and upper Malibu Creek, in the Calabasas General Plan study area.

Santa Monica Mountains dudleya is found on rocky, north-facing cliffs and slopes, often in shade. It is a perennial that blooms between May to June.

Many-stemmed Dudleya (Dudleya multicaulis)

This species is a federal Category 2 candidate and has been placed on CNPS List 1B. These plants are found only in southwestern California, and may be found on poor soils in the coastal sage scrub and grassland communities found in the Calabasas General Plan study area. CNPS, 1988, lists all of the reported locations of this species by USGS quadrangle; this list indicates that most Los Angeles County records are from the foothills of the San Gabriel Mountains.

Many-stemmed dudleya grows from a corm (an underground stem) that is found in heavy, often clayey soils. It occurs in chaparral, coastal sage scrub and annual grasslands concentrated around rock outcrops and under shrubs in chaparral. It is only visible aboveground during the months of May to June.

Blochman's dudleya (Dudleya blóchmanae ssp. blóchmanae)

This species is on CNPS List 1B. This species is associated with rocky outcrops in coastal sage scrub habitat and occurs at low elevations (<1500 feet) near the coast from San Luis Obispo south. It may occur in the Calabasas General Plan study area.

Braunton's Milkvetch (Astragalus brauntonii)

This species is a Category 2 candidate for federal listing. Braunton's milkvetch occurs in disturbed soil areas below approximately 1,500 feet elevation in portions of Ventura, Los Angeles and Orange counties. The seeds lie dormant in the soil and will germinate following burns or other disturbances for up to a five-year period.

Although there are relatively few records to judge from, most populations of Braunton's milkvetch have been found in limestone deposits, marine terraces and other calcareous soils (Fred Roberts, pers. comm.). The Data Base lists eight records of Braunton's milkvetch from the eastern Santa Monica Mountains and Baldwin Hills, and all of these records are in geologic formations that include pockets of limestone or are likely to lead to development of calcareous soils (e.g., the Topanga Canyon, Tuna Canyon and Coal Canyon formations).

Braunton's milkvetch is a perennial found on brushy hillsides, usually in firebreaks, in burned and other disturbed areas in the chaparral habitat located in the Calabasas General Plan study area. It is a perennial that blooms from February to June.

Santa Susana Tarweed (Hemizonia minthornii)

Santa Susana tarweed is a Category 2 candidate species, a state listed rare species, and is on the CNPS List 1B. It is only recorded from the Santa Susana Mountains, Castro Crest and Charmlee County Park, and Simi Hills, and within the Calabasas General Plan study area, Saddle Peak, and Calabasas Peak.

The tarweed is a stiff woody shrub found in rocky outcrops, in chaparral and coastal sage scrub. These outcrops are usually made of sandstone. It is a perennial that blooms from July to October.

Lyon's Pentachaeta (Pentachaeta Iyonii)

Lyon's pentachaeta is a Category 2 candidate species and is on the CNPS List 1B. Its historic range is along the coast of Los Angeles County and Santa Catalina Island; the current known distribution is in the Santa Monica Mountains within the Calabasas General Plan study area, and the Palos Verdes Peninsula.

The pentachaeta is a small composite growing in clayey soils in valley grassland and chaparral habitats. It is an annual that blooms in March through April.

Southwestern Pond Turtle (Clemmys marmorata pallida)

This turtle is a federal Category 1 Candidate and is considered a California Species of Special Concern (CSC) by the California Department of Fish and Game (CDFG). This thoroughly aquatic species ranges from San Francisco Bay to northern Baja California, but is now gone from many former localities. Uplands adjacent to water sources are used for nesting. Preferred areas include ponded sites containing cattail stands and flat rocks for basking. Within the Calabasas General Plan study area, this turtle may occur in various riparian habitats.

Coastal Western Whiptail (Cnemidophorus tigris multiscutatus)

The coastal western whiptail lizard is listed as a federal Category 2 candidate species. It is generally limited to the coastal and cismontane areas of southwestern California, extending from the coast inland to the Tejon, Cajon and San Gorgonio passes, and southward along the coast to northwestern Baja California.

The whiptail occupies arid and semiarid habitats where plants are sparse and open areas provide space for running. This lizard is also found in woodland, riparian vegetation and in the warmer, drier parts of forests. It feeds on insects, spiders, scorpions and other lizard species. In the Calabasas General Plan study area, the whiptail could occur in the riparian woodland, southern oak woodland, valley oak woodland, chaparral, coastal sage scrub, annual grasslands, disturbed or ruderal weedy, and rock outcrop habitats.

San Diego Horned Lizard (Phrynosoma coronatum blainvilli)

The San Diego horned lizard has been listed by the federal government as a Category 2 candidate species and is a CSC. This subspecies of the *Phrynosoma coronatum* taxa ranges from northern Baja California, north to Santa Barbara County. Historically, these lizards have been found along the coast and inland to the upper elevations of the Mojave and Colorado deserts. Development over most of the coastal and inland regions of southern California, however, has extirpated this lizard from those areas. The lizard can be found in various patches of undeveloped land and, in some cases, quite disturbed areas (i.e., grape vineyards).

Based on recent available data, the horned lizards have been found on sandy loamy soils with a zero percent slope, to thick chaparral with 50 percent slopes, and may be located in the Calabasas General Plan study area. The detailed population biology and spatial requirements for the San Diego horned lizard, however, are all but unknown.

Coastal Patch-nosed Snake (Salvadora hexalepis virgultea)

The coastal patch-nosed snake is a Category 2 candidate species. This snake is active during the day, and inhabits a range of relatively open sandy and rocky habitats from Santa Barbara County to northern Baja California. Coastal patch-nosed snakes could inhabit habitats that are similar to those where the coastal western whiptail occurs (i.e., chaparral communities) such as those in the Calabasas General Plan study area.

San Bernardino Ringneck Snake (Diadophis punctatus modestus)

This small snake is a Category 2 candidate species that inhabits moist areas of southwestern California from about Ventura to Orange counties. Ringneck snakes are seldom seen in the open. This species may occur along drainage courses, in riparian habitats, and in mesic chaparral and oak and walnut woodland habitats in the Calabasas General Plan study area.

San Diego Mountain Kingsnake (Lampropeltis zonata pulchra)

The San Diego mountain kingsnake is a Category 2 candidate and is a CSC. It is found in the cismontane ranges of California. It could occur locally along the coastal side of the Santa Monica Mountains; less commonly on the inland slope, in oak woodland habitats in the Calabasas General Plan study area. The San Diego mountain kingsnake feeds on lizards, snakes, bird eggs and nestlings, and small mammals.

Two-striped Garter Snake (Thamnophis hammondii hammondii)

This Category 2 federal Candidate species is very similar to the western aquatic garter snake (*Thamnophis couchii*), and was formerly considered a race of that species. It is highly aquatic and, thus, is only found in or near permanent sources of water. It ranges from Monterey County to northwestern Baja California. Streams with rocky beds supporting willows or other riparian vegetation would be the preferred habitat in the Calabasas General Plan study area.

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Black-shouldered Kite (Elanus leucurus)

The black-shouldered kite is a California Fully Protected Species. Its range in southern California extends from San Luis Obispo County south to San Diego County. The range of this species extends inland to the cismontane valleys of the interior.

This raptor occurs in lower elevations, particularly in the coastal valleys and plains of Orange and San Diego counties. It may also breed in sites with riparian trees such as oaks, willows and cottonwoods in the Calabasas General Plan study area. It is generally a non-breeding visitor in the interior, away from the coast.

Northern Harrier (Circus cyaneus)

The northern harrier is a CSC found circumpolar. It is found over grassland and marshy (riparian) habitats in all parts of southern California, and could be found in the Calabasas General Plan study area. It also occurs uncommonly over open desert and brushlands.

This species forages over a wide range of open habitats and can be expected to occur throughout most of southern California. Suitable foraging and nesting habitat in the grassland areas exist in the City and the Sphere of Influence.

Cooper's Hawk (Accipiter cooperii)

The Cooper's hawk is considered a CSC by the CDFG. In southern California, Cooper's hawk is an uncommon permanent resident except in the Salton Sea and Colorado River areas. These areas are now only used in winter.

Cooper's hawk would prefer lower elevation woodlands in the Calabasas General Plan study area, composed of such tree species as willow, cottonwood, sycamore or oak. Nesting is mainly restricted to woodlands and open forests of the montane areas of southern California.

Swainson's Hawk (Buteo swainsoni)

Swainson's hawk is a state listed threatened species. This species formerly occurred in abundance as a breeding species in California. They were once found throughout lowland California and were absent only from the Sierra Nevada, north coast ranges, Klamath Mountains, and portions of the desert regions. They are currently restricted to portions of the Central Valley and Great Basin regions of the state.

The Swainson's hawk requires large open grasslands with abundant prey in association with suitable nest trees. Preferred foraging habitat includes native grasslands or lightly grazed pasture, alfalfa and other hay crops and certain grain and row croplands. Suitable nest sites are found in mature riparian forest, such as those found in the Calabasas General Plan study area, lone trees or groves of oaks and other species in agricultural fields, as well as mature roadside trees.

Sharp-shinned Hawk (Accipiter striatus)

The sharp-shinned hawk is listed as a CSC. It is a winter visitor and migrant to coastal southern California. During the winter months, sharp-shinned hawks forage over a variety of habitats, that would include several habitats in the Calabasas General Plan study area. Birds make up the vast majority of its prey, with rodents and insects also being taken.

Golden Eagle (Aquila chrysaetos)

The golden eagle is not listed as rare or endangered; it is a California Fully Protected Species, making it illegal to capture or collect individuals. It was recently listed as a CSC. In southern California, the golden eagle is an uncommon resident in most habitats, except on the Colorado Desert and the Colorado River, where it is a winter visitor. Golden eagles avoid heavily forested mountain areas and are not generally found in the immediate coast or urbanized areas. The golden eagle is mainly a winter visitant in interior valleys such as the Antelope Valley, Cuyama Valley and Carrizo Plain, and some coastal plains such as the Tijuana River Valley.

The golden eagle prefers rocky canyons and hillsides for nesting but forages over wide areas and many types of habitats, including grasslands, brushlands, deserts, oak savannahs, open coniferous forests and the montane valleys of southern California. Thus, the grasslands and oak savannah habitats in the Calabasas General Plan study area could provide foraging areas for the golden eagle.

Merlin (Falco columbarius)

This species is a CSC due primarily to reproductive failure in parts of its breeding range (which is outside of California) and the taking of birds for falconry. This small falcon is a rare fall migrant and winter visitor.

The merlin frequents a number of habitats, including the coastal sage scrub and annual grassland habitats such as those found in the Calabasas General Plan study area. Foraging occurs along the coast, as well as over broken habitats such as montane valleys and open deserts with scattered clumps of trees.

Prairie Falcon (Falco mexicanus)

The prairie falcon is a CSC. Its range extends from the interior deserts of southern California to the coastal areas. It is an uncommon resident of the arid regions and a rare visitant, primarily in winter, to the coastal slopes.

Prairie falcon forages over open terrain and nests on rocky cliffs. Foraging habitat for prairie falcon includes grasslands and open desert scrub of the type that occur in the Calabasas General Plan study area, with some shifting into agricultural areas during the winter months.

Peregrine Falcon (Falco peregrinus)

The peregrine falcon is listed as endangered by both the federal and State governments due to reduced populations across the nation. Rigorous recovery efforts in recent years have resulted in significant population increases in many regions. It is a cosmopolitan species, occurring throughout nearly all habitats and regions.

Peregrine falcon forage over extensive areas and can be expected to occur almost anywhere in California, including the Calabasas General Plan study area, and especially along the coast. Foraging is generally concentrated in marine or aquatic environments.

Yellow-billed cuckoo (Coccyzus americanus occidentalis)

The yellow-billed cuckoo is listed as a State endangered species. This species typically nests in willow trees in a location hidden from view from the ground or adjacent trees. They prefer habitats such as deciduous riparian forest and woodland containing cottonwoods and tree willows, such as those found in the Calabasas General Plan study area. The loss of these habitats has contributed to the decline of this species in California.

The cuckoo historically bred in all regions of California except the central and northern Sierra Nevada, the Great Basin and the Colorado Desert. A survey conducted in 1977 found cuckoos in the following six areas: Sacramento Valley, Kern River, Owens Valley, Amargosa River, Santa Ana River and lower Colorado River. Breeding pairs are now restricted to Sacramento River in Butte, Glenn and Colusa Counties; Feather River in Sutter County; south fork of the Kern River; and along the Santa Ana, Amargosa and lower Colorado rivers.

Burrowing Owl

The burrowing owl is a CSC. It is widespread in the western hemisphere, but numbers have declined throughout California. This is primarily due to habitat loss and the destruction of ground squirrel colonies, which the owls use for nesting (Remsen, 1978). The burrowing owl could utilize open, flat grassland habitats that are found in the Calabasas General Plan study area.

Long-eared Owl (Asio otus)

The long-eared owl is a CSC. It is a rare resident in coastal southern California and is an uncommon resident in desert areas. The long-eared owl was formerly more common in the coastal areas. The long-eared owl is most commonly found in dense willow-riparian woodland and oak woodland habitats, such as those found in the Calabasas General Plan study area.

Willow Flycatcher (Empidonax traillii)

The willow flycatcher is listed as endangered by the state of California. This species has declined in numbers as a nesting species in California and in the west. The southern California breeding race, *E.t. extimus*, is a federal Category 1 candidate.

This flycatcher formerly nested in lowland riparian habitat throughout much of the State and probably bred in Los Angeles County, as well as the Calabasas General Plan study area. The southwestern willow flycatcher is widespread during migration and occurs regularly throughout southern California, generally favoring riparian areas. Substantially greater numbers of willow flycatchers pass through coastal southern California during fall migration, when the species is uncommon to fairly common, than during spring migration, when the species is rare, but regular.

Bank Swallow (Riparia riparia)

The bank swallow is listed as a threatened species by the State. It is a fairly common spring and fall transient through the interior areas of southern California, and a very uncommon spring transient and rare fall transient along the coast.

The preferred nesting habitat of the swallow is vertical banks consisting of fine-textured soils, with the nest being burrowed into the soil. These habitats most commonly occurred in vertical bluffs along streams and rivers. Due to development and channelization, most of these areas have been altered or removed. It is estimated that the range of the bank swallow has been reduced by 50 percent since 1900.

The bank swallow once bred locally throughout much of the lowland habitats of California, along the coast from Santa Barbara County to San Diego County, including the Calabasas General Plan study area. In southern California, the bank swallow was once widespread and numerous as a breeder; they have since been virtually extirpated. The population has also declined inland from the coast. Overall this species has undergone a decline in numbers and several breeding sites are no longer used.

California Horned Lark (Eremophila alpestris actia)

The California horned lark is a federal Category 2 Candidate species. It is found from Humboldt County south to northwestern Baja California. It is found along the coast of northern California, in the San Joaquin Valley, in the Coast Ranges south of San Francisco Bay, and in southern California west of the deserts. Horned larks are resident in grasslands, and nest in this habitat, and thus, could occur in the Calabasas General Plan study area.

Coastal Cactus Wren (Campylorhynchus brunneicapillus)

The southern California coastal population of this species is considered a federal Category 2 Candidate and a California Special Animal. The population extends from Ventura County south to San Diego and inland to San Gorgonio Pass. This sedentary species is found in coastal sage scrub containing prickly pear cactus, and also could occur in the Calabasas General Plan study area.

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California Gnatcatcher (Polioptila californica)

The California gnatcatcher is proposed for federal listing as endangered and is a California Species of Special Concern. California gnatcatchers historically occupied coastal sage scrub from Ventura and San Bernardino counties south to northwestern Baja California, but they no longer occur in much of the northern and eastern portions of their range. Theoretically, they could occupy the coastal sage scrub in the Calabasas General Plan study area.

Loggerhead Shrike (Lanius Iudovicianus)

This small carnivorous bird is a federal Category 2 candidate species. The loggerhead shrike is widespread in North America from southern Canada to southern Mexico, but has declined in many areas. Loggerhead shrikes favor expansive grasslands and other relatively flat, open country that occurs in the Calabasas General Plan study area, where they feed primarily on large insects and occasionally vertebrate prey.

Least Bell's Vireo (Vireo bellii pusillus)

This species is listed as endangered by both State and federal agencies. This small insectivorous songbird was once a common nesting species throughout much of lowland California. It is now nearly extirpated from all of the northern and central portions of the State, and is essentially restricted to coastal riverine systems in southern California and northwestern Baja California. Approximately 300 pairs are estimated to nest in California. Thus, it is possible that some vireos nest in the riparian habitats in the Calabasas General Plan study area. Most birds winter in southern Baja California. Habitat loss and nest parasitism by brown-headed cowbirds are generally believed responsible for the decline.

Yellow-Breasted Chat (Icteria virens)

This species nests in riparian woodland throughout much of western North America and winters in Central America. Thus, it is possible that this bird nests in the riparian woodland habitat found in the Calabasas General Plan study area. The State's breeding population has declined significantly, especially in southern California, and this species is now a California Species of Special Concern.

California Yellow Warbler (Dendroica petechia morcomi; includes D.p. brewsteri)

The California yellow warbler is a California Species of Special Concern because the breeding population has declined markedly in California. The yellow warbler is patchily distributed throughout southern California, occurring in riparian woodlands of the lowland and foothill canyons and across the foothills of the Transverse ranges. Riparian areas are exclusively used for nesting in the lowlands, but migrants are widespread and common. Thus, this species could utilize the riparian habitats found in the Calabasas General Plan study area.

Purple Martin (Progne subis)

This species is listed a CSC, second priority. It is a rare nester and summer resident. It has been extirpated from much of California by the introduced European starling, which has successfully competed with it for nesting sites. This species is not known to nest in the Santa Monica Mountains, but there is a slight potential for the bird to utilize the oak and sycamore woodlands found in the study area.

Southern California Rufous-crowned Sparrow (Aimophila ruficeps canescens)

This sub-species of rufous-crowned sparrow, found from Santa Barbara County to northwestern Baja California, is a federal Category 2 candidate species. In the Santa Monica Mountains, rufous-crowned sparrows primarily occur from Topanga Canyon and areas to the west (Kimball Garrett, pers. comm). Rufous-crowned sparrows typically occur in steep, rocky coastal sage scrub and open chaparral habitats in the Calabasas General Plan study area, particularly favoring scrubby areas mixed with grasslands; road cuts often provide suitable habitat for this species.

Tricolored Blackbird (Agelaius tricolor)

This federal C2 Candidate is currently proposed for listing by the California Department of Fish and Game. The species is almost endemic to cismontane California. The extremes of the range reach Oregon and northwestern Baja California. These birds frequent open country throughout the year. They nest in huge colonies and are especially vulnerable at that stage in their life cycle. It is possible that this blackbird could forage the grasslands in the Calabasas General Plan study area during the winter months.

Bell's Sage Sparrow (Amphispiza bellii bellii)

Bell's sage sparrow is listed as a federal Category 2 candidate species. This coastal race of the sage sparrow is an uncommon to fairly common but local resident in dense, dry chaparral in interior foothills along the coast. It also occurs locally close to the coast, such as in the coastal ridges of the Santa Barbara region and in the western Santa Monica Mountains. Bell's sage sparrow breeds in low dense chamisal chaparral and in the dry coastal sage scrub habitat, such as that occurring in the Calabasas General Plan study area.

San Diego Black-tailed Jackrabbit (Lepus californicus bennettii)

The San Diego black-tailed jackrabbit is listed as a federal Category 2 candidate species. Other races are common throughout all of California and occur in every habitat except at higher elevations in the mountain ranges. The coastal race is restricted to the cismontane areas of southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino and Santa Rosa Mountain ranges.

Jackrabbits inhabit a variety of habitats but are most common in relatively open situations, such as the coastal sage scrub, grasslands and open chaparral habitats found in the Calabasas General Plan study area.

Los Angeles Pocket Mouse (Perognathus longimembris brevinasus)

The Los Angeles pocket mouse is a Category 2 candidate and a California Species of Special Concern. Its historic range is from Los Angeles County to western Riverside County.

It is found in loose soils in dry areas of low elevation grasslands and coastal sage scrub habitats such as those occurring in the Calabasas General Plan study area. According to Williams (1986), this species may still exist in isolated parts of the historic range.

Southern Grasshopper Mouse (Onychomys torridus ramona)

The southern grasshopper mouse is a federal Category 2 Candidate. It occurs from northern Los Angeles County south to northwestern Baja California. The grasshopper mouse frequents low elevation grasslands in the cismontane areas of southern California, and thus could occur in the Calabasas General Plan study area.

San Diego Desert Woodrat (Neotoma lepida intermedia)

The San Diego desert woodrat is a federal Category 2 Candidate. It is found along the Pacific slope from about San Luis Obispo to northwestern Baja California. Desert woodrats frequent poorly vegetated arid lands and are especially associated with cactus patches. Thus, this species could utilize the drier habitats found in the Calabasas General Plan study area.

Pallid Bat (Antrozous pallidus)

Pallid bat is a California Species of Special Concern. It is relatively widespread, occurring in most of the western states, from southern British Columbia to northwestern Mexico. Pallid bats are found in a variety of habitats; but in southern California, they are principally known from deserts and semi-arid habitats that contain rock outcrops. In the daytime, these bats roost in tight crevices, while night roosts are in open shelters, such as rock outcrops, and in hollows in mature trees, open buildings, bridges and mines. Development of roosting sites has resulted in rapid population declines in some populations in recent years. Pallid bats are unique among North American bats in that they forage on the ground, taking scorpions, grasshoppers, beetles and other insects. They also apparently forage for insects in shrubs and trees.

This species could potentially roost within the City limits and Sphere of Influence. Riparian corridors, buckwheat scrub and the small patches of open grass and scrub located within the chaparral communities in the Calabasas General Plan study area appear to offer the best foraging opportunities for this species. Extensive rock outcrops provide the best potential roosting habitat for pallid bat; but this medium-sized bat can also roost in mature oak, sycamore and walnut trees, or minor, as well as extensive rock outcrops, found within the Calabasas General Plan study area.

Townsend's Big-eared Bat (Plecotus townsendii)

Two subspecies of this bat occur in California, *P.t. townsendii* and *P.t. pallescens*. Each of these subspecies is considered to be a California Species of Special Concern, and *P.t. townsendii* is a Category 2 Candidate for federal listing. *P.t. townsendii* occurs primarily on the west side of the Sierra Nevada Mountains, while *P.t. pallescens* occurs to the east and south. There is a large zone of overlap covering much of the State, and the City of Calabasas lies within this zone. Williams (1986) does not list distributional records for this species; but according to Dr. Elizabeth Pierson (pers. comm.), the nearest records of *P.t. townsendii* are from the San Gabriel Mountains, the Acton area and Santa Catalina Island.

This bat roosts in caves and other similar situations, including lava tubes and mine tunnels; buildings and other human-made structures are also utilized. This species forages in a variety of habitats within a five to seven mile radius around their roosting colonies and could conceivably forage in the City limits and Sphere of Influence. However, since active roosts for Townsend's big-eared bat are not known to exist in the Santa Monica Mountains, foraging is considered very unlikely in the Calabasas General Plan study area.

California Mastiff Bat (Eumops perotis californicus)

This bat is a Category 2 candidate for federal listing and a California Species of Special Concern. The California mastiff bat is the largest of all North American bats; it is known historically from north-central California south to northern Baja California, eastward across the southwestern United States and northern Mexico to west Texas and Coahuila. In California, most records are from rocky areas at low elevations, where roosting occurs primarily in crevices. California mastiff bat forages quite differently than the pallid bat, catching insects at very high elevations. This species was "quite commonly encountered in the Los Angeles basin and surrounding mountain ranges as recently as the 1950s and 1960s (Pierson, pers. comm.)." Williams (1986) lists numerous records of California mastiff bat from Los Angeles County, including two from the vicinity of the project site ("Santa Monica," and "Santa Monica Mountains, crest at east end [Vaughan, 1959]"). The statewide population has undergone a significant decline in recent years (Williams, 1986), prompting the CDFG to fund a statewide survey. This bat could potentially forage within the Calabasas General Plan study area.

Valley Oak Ant (Proceratium californicum)

The valley oak ant originally was only reported from oak woodlands in the Central Valley and, therefore, was listed as a federal candidate for endangered species listing. However, it has since been found in the redwood forest near Felton in northern California and, therefore, may not be as limited in its habitat requirements as originally thought. Therefore, the Federal government has revised its listing to a Category 2 candidate. In the Santa Monica Mountains, this species was found originally described in oak woodland habitat at Tapia Canyon Park located just outside of the Calabasas General Plan study area. No populations have been seen in the Santa Monica Mountains in the recent past.

Santa Monica Mountains Hairstreak (Satyrium auretorum spadix)

This subspecies was described by Emmel and Mattoni in 1989-1990. Based on its limited known range, this subspecies was made a Category 2 Candidate for federal listing in 1991. The known range of the Santa Monica Mountains hairstreak consists of only three locales in the western half of the Santa Monica Mountains located within six miles of each other; the easternmost of these colonies is located approximately 13 miles northwest of the Calabasas General Plan study area. The areas known to support this butterfly all contain chaparral that includes scrub oak (*Quercus dumosa*), the primary foodplant for caterpillars of *S. auretorum*. In describing the distribution of this species, Emmel and Mattoni (1989-1990) states, "The eastern part of the mountains have been intensively collected since the 1940s ... without any evidence of the species (p. 103)." This species utilizes chaparral and riparian scrub habitat which do occur in the Calabasas General Plan study area.

Santa Monica Shieldback Katydid (Neduba longipennis)

This nocturnal insect is a Category 2 candidate species that occurs only in the Santa Monica Mountains. Only one population of Santa Monica shieldback katydid is known. This population was discovered at the mouth of Big Rock Canyon (approximately 7.5 miles west of the project site), on June 19, 1975. A total of 21 katydids were collected and studied. According to Rentz and Weissman (1981), "Most specimens were found on the introduced ice plant (*Mesembryanthemum* sp.), others were heard less commonly in adjacent chaparral (p.97)." This shieldback katydid was considered to be distinct from other, similar species (e.g., *Neduba diminutiva malibu*) based primarily on differences in calling, along with minor physical differences.

Of the 70 taxa of Orthoptera (jumping insects, including grasshoppers, katydids, crickets, etc.) known to occur in the Santa Monica Mountains, nine have never been found elsewhere (Rentz and Weissman, 1981). Of these nine "endemics," three are full species and six are subspecies; however, only the Santa Monica shieldback katydid is recognized as a candidate for listing by the State or federal governments.

According to Dr. David Weissman, one of two authorities on the Orthoptera of the Santa Monica Mountains, streambed and chaparral communities could provide habitat for the Santa Monica shieldback katydid and other local "endemics," such as *N. d. malibu* (pers. comm.). These two communities do occur in the Calabasas General Plan study area.

SPECIES OF LOCAL CONCERN

The following species are apparently not listed in any state or federal publication but are considered to be of local concern in the environmental documents reviewed.

Shedding primrose (Camissonia boothii ssp. decorticans)

Shedding primrose has a historical distribution away from the immediate coast in Monterey and San Benito Counties to northern Los Angeles and Kern counties. Near the Santa Monica Mountains, it is recorded from Griffith Park.

The primrose could grow on open banks and flats in the Calabasas General Plan study area. It is an annual species that blooms from March to June.

Wind Poppy (Stylomecon heterophylla)

Wind poppy has a historical distribution in the Coast Ranges from Lake County south to the San Joaquin Valley and the foothills of the southern Sierra Nevada. It has also been found in Baja California and on the Channel Islands. It is found only in the vicinity of Malibu Lake in the Santa Monica Mountains.

The poppy could grow in burns, oak woodlands, chaparral and grassy and brushy slopes in the Calabasas General Plan study area, below 4,000 feet. It is an annual species that blooms from April to May.

Monolopia (Monolopia lanceolata)

Monolopia has a historical distribution extending from the South Coast Range valleys and San Joaquin Valley from Salinas Valley and San Joaquin County to Riverside County. It extends on the east side of the San Joaquin Valley from Fresno County to Tehachapi and is rarely seen east to Mojave and Kern counties. Locally in the Santa Monica Mountains it is known only from upper Malibu Creek.

Monolopia grows on grassy slopes and valley floors from 500 to 4,000 feet. It commonly occurs in chaparral, grasslands and southern oak woodland habitats, and thus could occur in the Calabasas General Plan study area. It is an annual herb that blooms from March to May.

Rabbitbrush (Chrysothamnus nauseosus ssp. mohavensis)

This subspecies of rabbitbrush is historically distributed from the South Coast Ranges (Mt. Hamilton, Tassajara region to Ventura County) along the southernmost Sierra Nevada (Tulare and Kern counties) to the head of the San Joaquin Valley and western Mojave Desert. It also extends east to Nevada. Its local distribution in the Santa Monica Mountains is in the canyon bottom above Westlake.

Rabbitbrush grows on well-drained scarcely alkaline soils from 2,500 to 6,000 feet in woodlands and creosote bush scrub and could theoretically be located in the Calabasas General Plan study area. It is a perennial shrub that blooms adventitiously.

Thread Stem (Pterostegia drymarioides)

Thread stem is historically distributed from cismontane California to Oregon, occasionally on the desert. It is known from Baja California. It is found scattered on grassy slopes throughout the Santa Monica Mountains, and may occur in the Calabasas General Plan study area.

Thread stem grows in many plant communities below 5,000 feet. It is an annual that blooms from March to July.

Small-flowered Fiddleneck (Amsinckia menziesii)

Small flowered fiddleneck is historically distributed in cismontane valleys away from the immediate coast from San Diego County north. It is also known from Santa Catalina Island and Washington, Idaho and Utah. It is locally found in upper Decker Canyon.

The fiddleneck grows below 5,000 feet on grassy hillsides, and may occur in the Calabasas General Plan study area. It is an annual that blooms from April to June.

Hind's Willow (Salix hindsiana var. lecuodendroides)

Hind's willow is historically distributed sparingly from Santa Clara and Tulare counties to Kern County. It is more commonly known from Ventura to San Diego counties and in Baja California. It is found in the Santa Monica Mountains at low elevations from the entire north side of the range, and south along the west end to Point Mugu.

Hind's willow is found in many plant communities, and could occur in the Calabasas General Plan study area. It is common locally along ditches, in sand bars, and other open areas below 3,000 feet. It is an erect shrub or small tree, blooming from March to May.

Prince's Plume (Stanleya pinnata)

Prince's plume is historically distributed from the northern base of the Santa Rosa Mountains north to Cuyama Valley and Inyo County. It also extends east to North Dakota, Kansas and Texas. In the Santa Monica Mountains, it is found only near Malibu Lagoon.

Prince's plume is found in creosote bush scrub, Joshua tree woodland and pinyon juniper woodland from 1,000 to 3,000 feet. It grows on seleniferous soil, desert slopes and washes. In the Santa Monica Mountains, it could utilize coastal sage scrub in the Calabasas General Plan study area on road cuts facing the ocean. It is an annual or sometimes perennial plant that blooms from April to September.

Big Squirreltail (Elymus multisetus)

Big squirreltail is historically distributed from cismontane California (cismontane refers to the area between the coastal and mountain regions, separate from the desert) to the White Mountains in Inyo County. It also is known from Washington, Arizona, Utah and

Baja California. In the Santa Monica Mountains, it is known from the upper drainage of Malibu Creek in southern oak woodland.

Big squirreltail is found in many plant communities on rocky or brushy slopes and waste places, and could occur in the Calabasas General Plan study area. It is a perennial that blooms from May to July.

Santa Monica Mountains Band-winged Grasshopper (Trimerotropis occidentaliodes)

The Santa Monica Mountains band-winged grasshopper is active during the day from June to September. It is found in low grass and bare soil on hillsides, ridges and dirt roads, and on trails and bare ground in chaparral and coastal sage scrub. Thus, it could potentially be present in disturbed areas, grasslands, and coastal sage scrub in the Calabasas General Plan study area.

Monarch Butterfly (Danaus plexippus)

This widespread butterfly is a California Special Animal, a broad term used to refer to all the vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base (Data Base), regardless of their legal protection status. This species is of concern primarily because monarchs are colonial, roosting in large concentrations that are often located in groves of large eucalyptus or pine trees; removal of important roost sites may have substantial effects on monarch populations. The monarch butterfly could potentially utilize eucalyptus or pine groves in the Calabasas General Plan study area.

In California, monarchs produce five or more flights, or generations, each year. The caterpillars of the final flight are known to feed on narrow-leaved milkweed (*Asclepias fascicularis*), a plant that occurs as a sub-dominant in the ruderal/native plant association. The field surveys were conducted at an inappropriate time of year to determine whether monarch caterpillars feed on the milkweed plants on the project site.

Coast Range Newt (Taricha torosa torosa)

The status of the coast range newt was not provided in any of the documents. Because the status is unknown, it is included in this section.

The coast range newt is found in the Coast Ranges of California from Mendocino County to the western slope of the Peninsular Ranges in San Diego County.

It breeds in ponds, reservoirs and slowly flowing streams. In the Sierra Nevada and the mountains of southern California, it is found in the large rivers and streams where it may enter fast water. Thus, it could theoretically utilize the riparian habitats located in the Calabasas General Plan study area.

Silvery legless lizard (Aniella pulchra pulchra)

The silvery legless lizard is identified as locally uncommon in the Santa Monica Mountains. This species is found throughout southern California in a variety of habitats. It ranges from near Antioch south to the Coast Ranges, Transverse Mountains and Peninsular Ranges into northwestern Baja California.

The silvery legless lizard needs loose soil for burrowing, moisture, warmth and plant cover. It would prefer the sparse vegetation of beaches, chaparral pine-oak woodland and streamside growth of sycamores, cottonwoods, and oaks located in the Calabasas General Plan study area.

Rock Wren (Salpinctes obsoletus)

The range of rock wren extends from Canada through the western U.S. and into Mexico; this species is generally an uncommon to fairly common resident in rocky, often mountainous areas throughout most of the southern portion its range. However, according to Kimball Garrett, Ornithologist at the Los Angeles County Museum of Natural History, rock wren is quite rare as a resident in the Santa Monica Mountains, with higher density in the western half of the range, away from the coast (pers. comm.). In the eastern half of the range and near the coast, migrants and winter visitors (birds that nest elsewhere) are encountered more regularly than resident pairs, often in habitats that would not be suitable for nesting. On the basis of their overall rarity as a nesting species in the Santa Monica Mountains, rock wren is considered to be a species of local interest, and it could occur in the Calabasas General Plan study area or rock outcrops (although it is a very rare resident of the Santa Monica Montains).

Grasshopper sparrow (Ammodramus savannarum perpallidus)

The grasshopper sparrow has no official status but is of local interest. These sparrows breed in grasslands from southwestern Canada through the western U.S. to northwestern Mexico and winter from the southern U.S. to Central America. Theoretically it could occur in the Calabasas General Plan study area in grassland habitats.

Ringtail (Bassariscus astutus)

The ringtail is identified as locally rare in the Santa Monica Mountains. It prefers rocky outcrops and cliffs near water in chaparral habitat. The ringtail makes dens in caves or crevices along cliffs, in hollow trees, unused buildings and rock piles (Burt & Grossenheider, 1976). Thus, it is potentially present in the Calabasas General Plan study area location.

Badger (Taxidea taxus)

The badger is identified as locally uncommon in the Santa Monica Mountains. This species prefers open grassland and desert areas, where they establish burrows and territories. They also are found in valley oak woodland habitats with an open understory. Small rodents are the common prey item for this species. The badger is potentially present in several habitats occurring in the Calabasas General Plan study area.

Long-tailed weasel (Mustela frenata)

The long-tailed weasel is identified as locally uncommon in the Santa Monica Mountains. It is found in all land habitats near water. The long-tailed weasel feeds mostly on small mammals up to the size of a rabbit, and also takes a few birds and other animals. It is potentially present in riparian habitats of the Calabasas General Plan study area.

Mountain Lion (Felis concolor)

The mountain lion is not listed or considered a candidate for listing as threatened or endangered by any state or federal agency. It is a species of local interest that likely occurs in the Calabasas General Plan study area. This species ranges over a very large area, and in the Calabasas General Plan study area, utilizes wildlife corridors to travel between the Santa Monica Mountains and the Simi Hills.

REGULATORY PROCESSES/PERMITTING ISSUES/MITIGATION COMPLIANCE

Army Corps of Engineers

The Army Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

Examples given in the regulations of interstate commerce connections for isolated (non-tributary) waters, the presence of which would establish the required nexus, include: waters that are or would be used as habitat by birds protected by Migratory Bird Treaties; waters that are or would be used as habitat by other migratory birds that cross state lines; waters that are or would be used as habitat for endangered species; or waters that are or would be used to irrigate crops sold in interstate commerce.

In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics:

Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils.

Hydric soils are saturated or inundated long enough during the growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation.

Wetland Hydrology exists when the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions.

Determination of wetland limits may be obfuscated by a variety of natural environmental factors, including cyclic periods of drought and flooding or highly ephemeral stream systems. During periods of drought, for example, bank return flows are reduced and water tables lowered. This results in a corresponding lowering of ordinary high water and invasion of upland plant species into wetland areas. Conversely, extreme flooding may create physical evidence of high water well above what might be considered ordinary, and may allow temporary invasion of hydrophytic species into non-wetland areas. In highly ephemeral systems, typical of Southern California, these problems are encountered frequently. In these situations, professional judgement and knowledge of local ecological conditions come into play in delineating wetlands.

In the case of small impact areas, i.e., less than one acre, a project is generally included under the existing Nationwide Permit 26. However, inclusion in this permit is subject to a number of conditions. One of these conditions is that if a federally listed endangered or threatened species is affected by a project, such as the least Bell's vireo, the Corps consults with the U.S. Fish and Wildlife Service as required by Section 7 of the Endangered Species Act. Based on this consultation and the evaluation of impacts by the U.S. Fish and Wildlife Service the Corps can issue or deny a 404 Permit, or require further studies or require mitigation prior to issuance of a Permit.

Wetlands Permitting Issues

Section 404 Nationwide Permit

Processing a Nationwide Permit through the Corps requires submittal of an application package consisting of a Predischarge Notification and supporting documentation. Recent changes in Nationwide Permit regulations require that Nationwide Permit applicants contact the U.S. Fish and Wildlife Service regarding endangered species issues and the State Historic Preservation Office regarding cultural resources prior to submitting a Predischarge Notification to the Corps. Typically, this requires preparation of a detailed letter describing the resources associated with the property and including appropriate documentation.

Because the State has not yet certified the new (1992) Nationwide Permits, a Section 401 Water Quality Certification or waiver from the Regional Water Quality Control Board must be obtained; the Corps requires evidence of a certification or waiver prior to authorizing an Nationwide Permit. This effort involves preparation of an application package that includes discussion of water quality and wetland issues and potential impacts to beneficial water uses.

Section 404 Individual Permit

If an Nationwide Permit is not applicable to the project, or if the Corps determines that an Nationwide Permit is not appropriate, the project will require an individual permit. In addition to the requirements discussed above, the following additional steps are required.

Alternatives Analysis

EPA's guidelines state that "...no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem..." This statement is fundamental to the requirement by the Corps for an objective analysis of alternatives as part of the permitting process. An alternative is considered practicable if it is available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes. The Corps requires submittal of a detailed analysis of on-site and off-site project alternatives as part of the submittal package.

Response to Public Notice Comments

The Corps public notice typically generates comments regarding various aspects of the project, many of which are related to wetland and alternatives issues. At the end of the public notice period, the Corps will forward any substantive comments to the applicant for their response.

Environmental Assessment

The issuance of a permit by the Corps constitutes a "major federal action," which triggers the requirement for review under the National Environmental Policy Act. For permit decisions, the required document typically is an Environmental Assessment prepared according to Corps regulations for permit actions. The Corps can prepare these documents internally; however, permit applicants can greatly expedite the regulatory process by providing a Draft Environmental Assessment to the Corps for their review and adoption. Typically, EIR material can be incorporated into the Nationwide Permit document.

Upon completion of the above, the Corps will review the project for compliance with the 404(b)(1) guidelines and conduct a public interest review. A permit will be issued if the Corps finds that the project complies with the guidelines and is not contrary to the public interest.

CDFG Notification of Streambed Alteration

CDFG processing requires submittal of an application package plus processing fee. Because CDFG will not respond to notifications prior to local approval, as evidenced by certification of the final EIR, the CEQA process must be completed prior to submittal of a notification.

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The following information is required in the submittal package:

- Complete drawings, in the appropriate format, showing project vicinity, location and necessary project details in plan and cross section view.
- A detailed project description, which includes the project background and a summary of project impacts, alternatives and mitigation measures.
- The wetland/jurisdictional delineation.
- The completed mitigation plan.
- Evidence of local project approval.

CDFG typically issues an Agreement within 30 days of submittal of a notification. Conditions (mitigation) are usually included for protection of fish and wildlife resources. The applicant can negotiate with CDFG if the conditions are not acceptable.

Federal and State Endangered Species Acts Permits and Requirements

Section 10(a) Permit - Federal Endangered Species. The Section 10(a) permit is concerned with endangered species. This permit allows for incidental take of endangered species. Its purpose is protection of an endangered species while allowing use of the land by the landowner.

Section 10(a) permits are issued by the Secretary of the Interior. Before the Secretary will issue the permit, the applicant must submit a conservation plan that specifies the following:

- The impact likely to result from such taking;
- What steps will be taken to minimize and mitigate such impacts, and available funding to implement those steps;
- Alternative actions to the taking that were considered and the reasons why the alternatives were not utilized; and
- Other measures that may be required by the Secretary as being necessary or appropriate for the purposes of the plan.

The plan and permit application must be made available for public comment. If, after this period, the Secretary finds that the following conditions are met, the Secretary shall issue the permit:

- The taking will be incidental;
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

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- The applicant will ensure that adequate funding will be provided;
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild;
- Additional measures as required by the Secretary will be met; and
- Any other requirements or assurances required for implementation.

The outline of steps required for a Section 10(a) permit are as follows:

Permit Application and Preparation of Conservation Plan

As noted above, the permit application will require the preparation of a conservation plan showing that the proposed project will result in only incidental take and will minimize and mitigate for those impacts, and that the chosen alternative is the only viable one. The conservation plan is prepared by the project proponent, usually in coordination with the local U.S. Fish and Wildlife Service office.

Preparation of Environmental Assessment

After receipt of the permit application, the U.S. Fish and Wildlife Service will prepare a draft Environmental Assessment on the application. Not infrequently, the U.S. Fish and Wildlife Service will request the assistance of the permit applicant in the preparation of this document.

Publication of Notice for Section 10(a) Permit, Circulation of Draft Environmental Assessment and Public Review

Upon receipt (and acceptance) of the permit application, the U.S. Fish and Wildlife Service will publish a notice in the Federal Register regarding the Environmental Assessment and permit application. The notice will indicate that, for a minimum of 30 days, the U.S. Fish and Wildlife Service will accept public comments on the application. If there are no insurmountable objections submitted during the public comment period, then the U.S. Fish and Wildlife Service will review the application and any changes made as a result of the comment period, and will make a recommendation to the Secretary.

If the U.S. Fish and Wildlife Service finds that the application is inadequate, or that an Environmental Assessment is insufficient to address the environmental concerns, they may require the preparation of an Environmental Impact Statement. If this document is required, there will be a required circulation of the Environmental Impact Statement and additional public review and comment.

Section 7 Consultation

As mentioned earlier, both public and private agencies must consider the potential affect of their actions on federally listed species. This includes the U.S. Fish and Wildlife Service in their review of a Section 10(a) permit application. As part of the evaluation of affect, federal agencies must consult with the U.S. Fish and Wildlife Service for their opinion of the jeopardy of the action. This consultation is required under Section 7 of Federal Endangered Species Act. The U.S. Fish and Wildlife Service will conduct an internal consultation when considering Section 10(a) permits.

For most private sector projects, Section 7 consultation occurs when a federal permit is applied for. The most common permits are the Section 10(a) and Clean Water Act Section 404 permits. Some local highway projects also require Section 7 consultation by the Federal Highway Administration due to the use of Federal Highway Trust Funds. The consultation is held between the federal agencies involved; the private sector applicant may supply information for consideration during the consultation.

The steps required for a formal consultation include the determination of whether a formal consultation is needed at all. This determination is made as part of an informal consultation. If the consultation is needed as part of a permit application, the following steps will be required in addition to those for the permit:

Biological Assessment and Discussion

A biological assessment is required in order to determine if there will be listed species potentially affected by the project. The biological assessment is usually prepared by the U.S. Fish and Wildlife Service, although the applicant is often asked to supply additional information, as needed.

Initiation of Formal Consultation

The federal action (e.g., Section 10(a) permit or Section 404 permit) is defined and a description of the manner in which the federal action may affect a listed species is provided.

Biological Opinion

The biological opinion is a formal opinion issued by the U.S. Fish and Wildlife Service on the project impacts to a federally listed species. As part of this opinion, the U.S. Fish and Wildlife Service will determine jeopardy. "Jeopardy" is when the proposed project or permit will jeopardize the continued existence of any federally listed species or result in the adverse modification or destruction of habitat of these species. The U.S. Fish and Wildlife Service will issue the determination of jeopardy or non-jeopardy after reviewing all the documentation associated with the proposed project.

If the U.S. Fish and Wildlife Service determines that the action will not jeopardize the species, the biological opinion may also include an incidental take authorization.

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Conference

In addition to addressing impacts to listed species, there are recommended procedures for addressing species that are either only proposed for listing or are likely to be listed in the future. These procedures come under the general heading of a "Conference," and are primarily designed to avoid potential delays or stoppage of work if a species is listed during the life of a project.

The steps required for a conference are similar to those for formal consultation. The main differences are that the decision issued by the U.S. Fish and Wildlife Service for a formal consultation is referred to as a formal biological opinion, whereas the decision issued by the U.S. Fish and Wildlife Service for a conference can take the form of a conference opinion or discretionary conservation recommendation. The conference opinion can be converted to a formal biological opinion upon listing of the species, provided there is no new information on the species and the project has not changed since the conference was held.

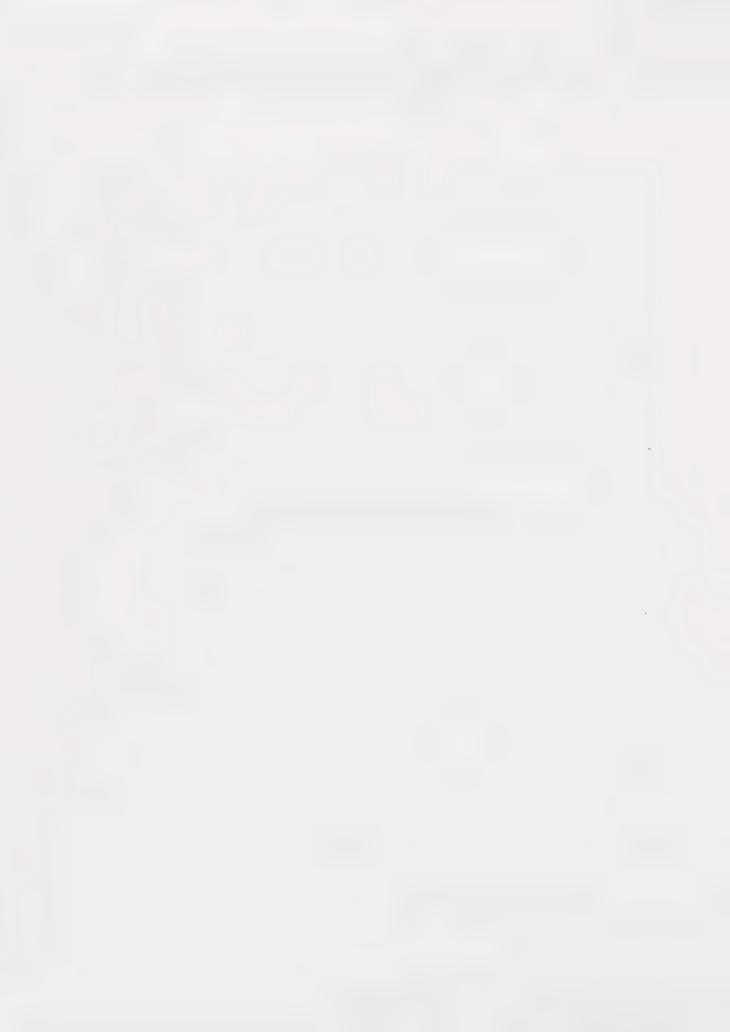
Section 2081 - State Endangered Species. This permit is similar to the federal Section 10(a) permit, except that it is administered by the state. The following types of information would also need to be submitted with the Section 2081 permit application or memorandum of understanding:

- The impact likely to result from such taking;
- What steps will be taken to minimize and mitigate such impacts, and available funding to implement those steps;
- Alternative actions to the taking that were considered and the reasons why the alternatives were not utilized; and
- Mitigation measures that may be required by the CDFG as being necessary or appropriate for the purposes of the plan.

The plan and permit application or MOU are reviewed by the CDFG. If, after this review, the CDFG finds that the following conditions are met, the CDFG will issue the permit or MOU:

- The taking will be incidental;
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;
- The applicant will ensure that adequate funding will be provided;
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild;
- Additional measures as required by the CDFG will be met; and
- Any other requirements or assurances required for implementation.

CIRCULATION



Intersection Number:

1

North/South Roadway:

Lost Hills Road

East/West Roadway:

Highway 101 Westbound Ramps

Analysis Conditions:

Existing

Improvements:

Existing Conditions

Move-	FORECAST CONDITIONS								
			Vo	V/C Ratio					
ment	Lanes	Capacity	AM	PM	AM		PM		
NBL	0	0	347	1,231	0.22	*	0.77		
NBT	1	1,600	35	93	0.24		0.83	1	
NBR	0	0	0	0	0.00		0.00		
SBL	0	0	0	0	0.00		0.00	2	
SBT	1	1,600	164	88	0.10	*	0.06		
SBR	1	1,600	47	62	0.00		0.00		
EBL	0	0	0	0	0.00		0.00		
EBT	0	0	0	0	0.00	*	0.00	3	
EBR	0	0	0	0	0.00		0.00		
WBL	1	1,600	215	121	0.13	*	0.08	3	
WBT	0	0	0	0	0.00		0.00		
WBR	1	1,600	84	105	0.05		0.07	_	
N/S Critical Movements							0.83		
E/W Critical Movements							0.08		
Right Turn Critical Movement							0.00		
Clearance Interval							0.00		
Existing ICU							0.90		
Level of Service (LOS)					0.45 A		E		

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

North/South Roadway: Lost Hills Road

East/West Roadway:

Highway 101 Eastbound Ramps

Analysis Conditions:

Existing

Existing Conditions Improvements:

		F		CONDITIONS				_
Move-			Volume		V	tio		
ment	Lanes	Capacity	AM	PM_	AM		PM	
NBL	0	0	0	0	0.00		0.00	
NBT	1	1,600	404	1,258	0.38	*	0.87	*
NBR	0	0	199	135	0.00		0.00	
SBL	0	0	135	81	0.08	*	0.05	4
SBT	1	1,600	238	127	0.23		0.13	
SBR	0	0	0	0	0.00		0.00	
EBL	0	0	43	73	0.03		0.05	
EBT	1	1,600	2	3	0.00		0.00	
EBR	1	1,600	1,511	317	0.94	*	0.20	1
WBL	0	0	0	0	0.00		0.00	
WBT	0	0	0	0	0.00	*	0.00	1
WBR	0	0	0	0	0.00		0.00	_
N/S Critical Movements							0.92	
E/W Critical Movements							0.20	
Right Turn Critical Movement							0.00	
Clearance		0.00		0.00				
					1.40			
Forecast I Existing ICU							1.12	
Level of Service (LOS)							F	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

3

North/South Roadway: East/West Roadway:

Lost Hills Road Agoura Road

Analysis Conditions:

Existing

Improvements:

Existing Conditions

Move-		FC		/C Ra	rio	-		
	7	C		ume		/C Ra		
ment	Lanes	Capacity	AM	PM	AM		PM	_
NBL	1	1,600	2	2	0.00		0.00	
NBT	2	3,200	441	844	0.17	*	0.28	
NBR	0	0	110	45	0.00		0.00	
SBL	1	1,600	466	88	0.29	*	0.06	
SBT	2	3,200	885	329	0.30		0.11	
SBR	0	0	88	25	0.00		0.00	
EBL	1	1,600	17	65	0.01	*	0.04	
EBT	2	3,200	2	20	0.00		0.01	
EBR	0	0	3	3	0.00		0.00	
WBL	1	1,600	16	71	0.01		0.04	
WBT	2	3,200	13	5	0.02	*	0.12	
WBR	0	0	62	382	0.00		0.00	_
N/S Critic	al Moven	nents			0.46		0.33	
E/W Critical Movements							0.16	
Right Turn Critical Movement							0.00	
Clearance					0.00		0.00	
Existing I	CU				0.50		0.49	
Level of Service (LOS)				A		A		

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

North/South Roadway: Las Virgenes Road East/West Roadway:

Mureau Road

Analysis Conditions:

Existing

Improvements:

Existing Conditions

Move- ment			DRECAST CO	V/C Ratio			_	
	Lanes	Capacity	ΛM	PM	AM	, 0 100	PM	
NBL	0	0	0	0	0.00	*	0.00	_
NBT	2	3,200	177	569	0.11		0.20	;
NBR	0	0	173	61	0.00		0.00	
SBL	1	1,600	70	20	0.04		0.01	1
SBT	2	3,200	543	326	0.17	*	0.10	
SBR	0	0	0	0	0.00		0.00	
EBL	0	0	0	0	0.00		0.00	
EBT	0	0	0	0	0.00	*	0.00	
EBR	0	0	0	0	0.00		0.00	
WBL	1	1,600	53	153	0.03	*	0.10	
WBT	0	0	0	0	0.00		0.00	
WBR	1	1,600	8	64	0.00		0.03	_
N/S Critical Movements							0.21	
E/W Critical Movements							0.10	
Right Turn Critical Movement							0.00	
Clearance	Interval	0.00		0.00				
Existing ICU							0.31	
Level of Service (LOS)							A	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

5

North/South Roadway:

Las Virgenes Road

East/West Roadway:

Highway 101 Westbound Ramps

Analysis Conditions:

Existing

Improvements:

		FC		ONDITIONS				
Move-				ume		C Ra		
ment	Lanes	Capacity	AM	PM	AM		PM	
NBL	1	1,600	84	247	0.05	*	0.15	*
NBT	2	3,200	651	360	0.20		0.11	
NBR	0	0	0	0	0.00		0.00	
				0				
SBL	0	0	0	256	0.00		0.16	
SBT	2	3,200	663	225	0.29	*	0.17	*
SBR	0	0	261	62	0.00		0.00	
EBL	0	0	0	0	0.00		0.00	
EBT	0	0	0	0	0.00	*	0.00	*
EBR	0	0	0	0	0.00		0.00	
WBL	2	3,200	964	453	0.30	*	0.14	*
WBT	0	0	0	0	0.00		0.00	
WBR	1	1,600	156	270	0.10		0.01	
N/S Critic	al Moven	nents			0.34		0.32	
E/W Criti	cal Move	ments			0.30		0.14	
Right Tur	n Critical	Movement			0.00		0.00	
Clearance					0.00		0.00	
Existing I	CU		-		0.64		0.47	
	Service (L	0.00			В		A.	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

6

North/South Roadway:

Las Virgenes Road

East/West Roadway:

Highway 101 Eastbound Ramps

Analysis Conditions:

Existing

Improvements:

Move-			V/C Ratio					
ment	Lanes	Capacity	AM	PM	AM		PM	
NBL	1	1,600	1	5	0.00	*	0.00	
NBT	2	3,200	818	1,492	0.26		0.47	:
NBR	0	0	0	0	0.00		0.00	
SBL	1	1,600	9	24	0.01		0.02	
SBT	2	3,200	1,270	627	0.49	*	0.26	
SBR	0	0	312	198	0.00		0.00	
EBL	0	0	371	221	0.23	*	0.14	
EBT	1	1,600	7	5	0.00		0.00	
EBR	1	1,600	415	219	0.25	*	0.13	
WBL	0	0	0	4	0.00		0.00	
WBT	1	1,600	0	2	0.00	*	0.05	
WBR	0	0	4	72	0.00		0.00	_
I/S Critic	al Moven	nents			0.50		0.48	
/W Critic	al Mover	ments			0.23		0.19	
ight Turi	n Critical	Movement			0.25		0.13	
_	Interval				0.00		0.00	
xisting I	CU				0.98		0.80	
-	ervice (L	06)			E		C	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

7

North/South Roadway:

Las Virgenes Road

East/West Roadway:

Agoura Road

Analysis Conditions:

Existing

Improvements:

		F	ORECAST C	ONDITIONS				
Move-			Vol	V/C Ratio				
ment	Lanes	Capacity	AM	PM	AM		PM	
NBL	1	1,600	35	52	0.02	*	0.03	*
NBT	2	3,200	625	894	0.20		0.28	
NBR	0	0	0	0	0.00		0.00	
SBL	0	0	0	0	0.00		0.00	
SBT	1	1,600	1,083	576	0.68	*	0.36	*
SBR	1	1,600	529	254	0.00		0.00	
EBL	2	3,200	203	566	0.06	*	0.18	*
EBT	0	0	0	0	0.00		0.00	
EBR	1	1,600	118	49	0.05		0.00	
WBL	0	0	0	0	0.00		0.00	
WBT	0	0	0	0	0.00	*	0.00	*
WBR	0	0	0	0	0.00		0.00	
N/S Critic	al Moven	nents			0.70		0.39	
E/W Criti	cal Move	ments			0.06		0.18	
Right Tur	n Critical	Movement			0.00		0.00	
Clearance	Interval				0.00		0.00	
Forecast	Existing	ICU			0.76		0.57	
Level of S	0				С		A	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

8

North/South Roadway:

Hwy 101 Westbound Off-Ramp (Pkwy Calabasas)

East/West Roadway:

Ventura Boulevard

Analysis Conditions:

Existing

Improvements:

		FC	DRECAST C	ONDITIONS				
Move-			Vol	ume	V	/C Ra	tio	
ment	Lanes	Capacity	AM	PM	AM		PM	
NBL	1	1,600	587	405	0.37	*	0.25	*
NBT	0	0	0	0	0.00		0.00	
NBR	1	1,600	194	67	0.12		0.04	
SBL	0	0	0	0	0.00		0.00	
SBT	0	0	0	0	0.00	*	0.00	*
SBR	0	0	0	0	0.00		0.00	
EBL	0	0	0	0	0.00		0.00	*
EBT	1	1,600	144	53	0.09	*	0.03	
EBR	0	0	0	0	0.00		0.00	
WBL	0	0	0	0	0.00	*	0.00	
WBT	1	1,600	74	396	0.05		0.25	*
WBR	0	00	0	0	0.00		0.00	
N/S Critic	al Moven	nents			0.37		0.25	
E/W Critic	al Move	ments			0.09		0.25	
Right Turi	n Critical	Movement			0.00		0.00	
Clearance					0.00		0.00	
Existing I	CU				0.46		0.50	
Level of S		OS)			A		A	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

9

North/South Roadway:

Parkway Calabasas

East/West Roadway:

Highway 101 Westbound On-Ramp

Analysis Conditions:

Existing

Improvements:

		FO		ONDITIONS				
Move-				ume		/C Ra		
ment	Lanes	Capacity	AM	PM	AM		PM	
NBL	0	0	328	465	0.21	*	0.29	4
NBT	1	1,600	284	73	0.38		0.34	
NBR	0	0	0	0	0.00		0.00	
SBL	0	0	0	0	0.00		0.00	
SBT	1	1,600	521	789	0.35	*	0.61	1
SBR	0	0	43	190	0.00		0.00	
EBL	0	0	0	0	0.00	*	0.00	1
EBT	0	0	0	0	0.00		0.00	
EBR	0	0	0	0	0.00		0.00	
WBL	0	0	0	0	0.00		0.00	
WBT	0	0	0	0	0.00	*	0.00	2
WBR	0	0	0	0	0.00		0.00	_
N/S Critic	al Moven	nents			0.56		0.90	
E/W Critic	cal Move	ments			0.00		0.00	
tight Tur	n Critical	Movement			0.00		0.00	
Clearance	Interval				0.00		0.00	
existing I	CU				0.56		0.90	
_	ervice (L	0.00			A		E	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

10

North/South Roadway:

Parkway Calabasas

East/West Roadway:

Highway 101 Eastbound Ramps

Analysis Conditions:

Existing

Improvements:

		r		ONDITIONS		IC D-	-1-	-
Move-				ume		/C Ra		
ment	Lanes	Capacity	AM	PM	AM		PM	_
NBL	0	0	0	0	0.00		0.00	
NBT	1	1,600	481	474	0.30	*	0.30	1
NBR	1	1,600	481	633	0.00		0.10	1
SBL	1	1,600	56	308	0.04	*	0.19	
SBT	1	1,600	493	501	0.31		0.31	
SBR	0	0	0	0	0.00		0.00	
EBL	1	1,600	133	45	0.08		0.03	
EBT	0	0	0	0	0.00		0.00	
EBR	1	1,600	397	690	0.25	*	0.43	
WBL	0	0	0	0	0.00		0.00	
WBT	0	0	0	0	0.00	*	0.00	
WBR	0	0	0	0	0.00		0.00	_
N/S Critic	al Moven	nents			0.34		0.49	
E/W Critic	al Mover	ments			0.25		0.43	
light Tur	n Critical	Movement			0.00		0.10	
Clearance	Interval				0.00		0.00	
orecast I	Existing	ICU			0.58		1.02	
evel of S	9				A		F	

^{*} Indicates critical turn movements for traffic analysis calculations.

Intersection Number:

- 11

North/South Roadway:

Parkway Calabasas

East/West Roadway:

Calabasas Road

Analysis Conditions:

Existing

Improvements:

		FC	ORECAST C	ONDITIONS				
Move-			Vol	ume	V,	/C Ra	tio	
ment	Lanes	Capacity	AM	PM	AM		_PM	
NBL	1	1,600	62	52	0.04		0.03	
NBT	2	3,200	482	273	0.15	*	0.09	*
NBR	1	1,600	25	31	0.00		0.00	
SBL	1	1,600	400	362	0.25	*	0.23	*
SBT	2	3,200	331	338	0.17		0.15	
SBR	0	0	198	147	0.00		0.00	
EBL	1	1,600	321	240	0.20	*	0.15	*
EBT	2	3,200	276	130	0.12		0.05	
EBR	0	0	115	45	0.00		0.00	
WBL	1	1,600	28	28	0.02		0.02	
WBT	2	3,200	139	182	0.04	*	0.06	*
WBR	1	1,600	236	458	0.00		0.00	*
N/S Critic	al Moven	nents			0.40		0.31	
E/W Critic	cal Move	ments			0.24		0.21	
Right Tur	n Critical	Movement			0.00		0.00	
Clearance	Interval				0.00		0.00	
					26:		0.55	_
Existing I					0.64		0.52	
Level of S	ervice (L	OS)			В		A	

^{*} Indicates critical turn movements for traffic analysis calculations.

FOUR WAY STOP CONTROL ANALYSIS

North/South Roadway:

Highway 101 Westbound Off-Ramp

East/West Roadway:

Ventura Boulevard

Analysis Conditons:

Existing

		** 1			oach		oach
			ıme	-	acity	Del	
Move		AM	PM	AM	PM	AM	PM
ment	Lanes	Peak	Peak	Peak	Peak	Peak	Peak
NBL	1	587	405				
NBT	0	0	0	1,148	879	13	8
NBR	1	194	67				
SBL	0	0	0				
SBT	0	0	0	122	(127)	1	1
SBR	0	0	0				
EBL	0	0	0				
EBT	1	144	53	145	216	44	3
EBR	0	0	0				
WBL	0	0	0				
WBT	1	74	396	49	276	293	233
WBR	0	0	0				
	Average	Intersec	tion Del	ay (sec.))	38	104
	_	tion Leve			,	E	F
							_

Methodology based on Transportation Research Circular 373, "Interim Materials on Unsignalized Intersection Capacity", July 1991.

GEOLOGY



Modelo Formation (Tm). This formation generally occurs in the northern portion of the study area occupying approximately 30 percent of the project area with a maximum thickness of 3,000± feet. Characteristics vary according to location and the following subunits:

Upper Shale:

- Location: Laskey Mesa (north of Calabasas) and the northern portion of Calabasas.
- Topography/Vegetation: Subdued to moderate topography; usually grass covered.
- Soils: Expansive clay soils.
- Landslides: Small landslides in western exposures.
- Construction Factors: Pavement over this formation may expand;
 clay bearing beds dipping out of slopes may be prone to slides.
- Seismic Factors: Relatively minimal shaking on bedrock from distant earthquakes; grading problems could occur if earth fill is present.
- Groundwater Flow/Permeability: Probably poor.

Burnt Shale, Siltstone and Very Fine Siltstone:

- Location: Between Cheseboro and Palo Camado Canyons.
- Topography/Vegetation: Resistant to erosion and usually sparely grass covered.
- Soils: Thin, fragmented soils.
- Landslides: Prominent landslides on east side of Las Virgenes Canyon.
- Construction Factors: Very low density, porous rock.
- Seismic Factors: Potential for seismic response similar to other shale, siltstone and fine sandstone.
- Groundwater Flow/Permeability: Porous, but with unknown permeability potential.

Upper and Lower Sandstone:

- Location: Central and northern Calabasas.
- Topography/Vegetation: Commonly comprises rocky slopes which may be resistant to erosion; thin brush or grass due to rocky character.
- Soils: Very thin sandy soils or no soils.
- Landsliding/Erosion: Very minor landsliding; steep slopes may be subject to debris flows during heavy rains.
- Construction Factors: Probably difficult to grade with tractor unless weathered.
- Seismic Factors: Solid construction base relative to seismic shaking.
- Groundwater Flow/Permeability: Probably water permeable along bedding planes and at surface rock fractures.

Topanga Formation (undifferentiated) (Tt). The Topanga Formation is located in the middle and southern portions of the study area, occupying approximately 40 percent of the project area with a maximum thickness of 2,000 to 5,000 feet. Characteristics for the subunits are as follows:

Shale and Siltstone:

- Location: Small areas are contained in upper Liberty Canyon area, and in Dry Canyon.
- Topography/Vegetation: Grass covered slopes.
- Soils: Clay soils and slope wash.
- Landslides: Small slides occur throughout; cuts along Mulholland Highway may slough (i.e., collapse, slide).
- Construction Factors: Formation is easily excavated.
- Seismic Factors: Relatively minimal shaking on bedrock from distant earthquakes; grading problems could occur if earth fill is present.
- Groundwater Flow/Permeability: Poor.

Sandstone and Siltstones:

- Location: McCoy Canyon.
- Topography/Vegetation: Low rounded hills with grass and sparse brush.
- Soils: Clay-bearing sandy soils and slopewash.
- Landslides: Grading cuts may slough (i.e., collapse, slide).
- Construction Factors: Clay-bearing layers may cause excavation/foundation problems.
- Seismic Factors: Seismic shaking from distant strong earthquakes probably minimal.
- Groundwater Flow/Permeability: Poor to fair.

Conglomerate, Volcanic Conglomerate, Conglomerate Sandstone:

- Location: Principally in McCoy-Dry Canyons.
- Topography/Vegetation: Dense chaparral usually covers the moderate to less commonly steep slopes.
- Soils: Thin bouldery soils.
- Landslides: Some possible landslides; steep slopes relatively stable.
- Construction Factors: Conglomerates resistant to erosion difficult to excavate.
- Seismic Factors: Potential for boulders to roll down slopes during moderate earthquake.
- Groundwater Flow/Permeability: Fair, unless well-cemented, then poor.

Conejo and Other Volcanics Formation (Tcv). This formation is primarily located in the southern portion, as well as in the middle of the project area, totalling approximately 25 percent of the project area. Characteristics are as follows:

- Location: Primarily in the southern Sphere of Influence along Mulholland Highway and Cold Creek.
- Topography/Vegetation: Chaparral covered.
- Soils: Basalt dikes are usually weathered and non-resistant (i.e., subject to erosion); larger bodies mostly resistant to erosion.
- Landslides: Possible landslides occur throughout; debris flows during heavy rains where vegetation is thin.
- Construction Factors: Weathered parts yield clay; unweathered parts might be rippable only with difficulty.
- Seismic Factors: Seismic response has minimal effect from distant strong earthquakes.
- Groundwater Flow/Permeability: Very poor.

Youger Alluvium Formation (Qc). Located along the bottom of drainage courses, this formation occupies only five percent of the study area. Characteristics are as follows:

- Location: Widespread over canyon bottoms and valleys. Deposits are commonly thin, less than 10 to 15 feet.
- Topography/Vegetation: Nearly flat topography; grassy, mustard vegetation where damp.
- Soils: May be expansive.
- Landslides: Small slides may occur where cut by stream banks.
- Construction Factors: Potential for residential slab cracking where soils are expansive.
- Seismic Factors: Liquefaction may occur during severe shaking where ground water level is within 10 to 15 feet of the surface, especially if deposits are sandy silt or silty sand.
- Groundwater Flow/Permeability: Poor to fair.

ENVIRONMENTAL RESOURCES



IV. ENVIRONMENTAL RESOURCES

Environmental Resources section of the Calabasas General Plan: Community Profile provides the factual background and understanding necessary to meet the State's data and analysis requirements for Open Space and Conservation Elements. It also presents the background information necessary to comply with the provisions of the Southern California Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) requirements that local agencies address air quality issues.

The Environmental Resources chapter includes the following major sections.

- Hillsides, Canyons, and Ridgelines
- Air Quality
- Biotic Resources
- Water Resources
- Mineral Resources

A. HILLSIDE, CANYON, AND RIDGELINE MANAGEMENT

The topographical conditions in the Calabasas General Plan study area are varied, consisting of differential hillside terrain with numerous valley and arroyo conditions. Flat or level topography constitutes a small percentage of the terrain within the study area.

The highest elevation within the study area is approximately 2,800 feet. It is located in the most southerly portion of the Calabasas General Plan study area, adjacent to Saddle Peak Road. The lowest elevation, approximately 500 feet in elevation, occurs in the southwestern portion of the study area at Las Virgenes Road/Mulholland Canyon Road and the Monte Nido community.

The unique valleys and arroyos that characterize the study area include Topanga Canyon, Cold Canyon, McCoy Canyon, Crummer Canyon, Gates Canyon, Las Virgenes Canyon, Stokes Canyon, Malibu Canyon, and Dark Canyon. Prominent peaks within the study include Saddle Peak and Calabasas Peak. The Calabasas General Plan study area also contains several significant ridgelines, which are indicated on Figure II-4, Scenic Features, in Section II, Community Development and Design.

As mentioned above, the Calabasas study area contains numerous unique physical resources including a variety of ridgelines, hillsides, canyons, and rolling hills. The presence of numerous park and recreation resources established as a result of the community's unique physical resources is an affirmation of the potential resources that remain in Calabasas. Further discussion of topographic and landform features as they relate to scenic beauty and aesthetics in Calabasas may be found in Section II-D, Community Design.

B. AIR QUALITY

CLIMATE AND WINDS

Southern California's climate comes from the interaction of meteorological influences with the area's topography. Most important of all meteorological influences, judged by the effects produced on ambient air pollutant concentration, is the Pacific High, a semi-permanent region of high atmospheric pressure centered over the eastern Pacific ocean. During the late spring, summer, and early fall, descending warm air from the Pacific High blankets a cooler layer of air closer to the ground. This stable temperature inversion inhibits the vertical dispersion of air pollutants. Coupled with abundant sunshine and light surface winds, both common during the summer months, the increased quantities of photo chemically produced air pollutants are not readily dispersed. This causes the region's most serious air quality problems.

The City is located at the western end of the San Fernando Valley, the northwestern boundary of the South Coast Air Basin (hereafter referred to as the "basin"), and is considered a route for air exchange between the coastal and inland valley areas. In the absence of large-scale influences, a daily sea breeze/drainage flow -- characterized by afternoon breezes flowing from sea to land followed by late evening/early morning breezes from land to sea -- dominates local winds. The afternoon winds, generally strongest during the summer, flow north, and can reach average speeds of 8 to 12 miles per hour. The late evening/early morning winds flow south. These drainage winds are strongest in the winter season and generally average five miles per hour.

Recorded air temperatures (in degrees Fahrenheit) in the City range from the high 50's to high 90's in the summer and from the low 40's to the high 60's in the winter. Peak hourly temperatures greater than 100 have been recorded during the late summer; and minimum hourly temperatures below 30 have been recorded during the winter. Mean annual precipitation in the City is approximately 13.6 inches, with over 90 percent of this rainfall occurring between November and March, inclusively. Annual precipitation can range from less than one third of the mean value to almost twice as much (Calabasas Park West Project, October, 1990).

AIR POLLUTANTS AND AIR QUALITY STANDARDS

The Federal Clean Air Act (as amended in 1990) sets forth national ambient air quality standards, while the California Air Resources Board establishes State air quality standards. These standards are the maximum ambient levels permissible for each air pollutant so as not to adversely affect public health or welfare (see Table IV-1).

The purpose of the federal and State primary standards is to provide sufficient protection, with a margin of safety, from certain identified adverse health effects (see Table IV-2).

Currently, federal and State standards for ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are often exceeded in the Basin and, thus, the Basin is considered a non-attainment area for these pollutants.

Table IV-1
Air Quality Standards
Calabasas General Plan Study Area
1992

Pollutant	Averaging Time	Federal Standard	California Standard
Ozone	1-hour	0.12 ppm ¹	0.09 ppm
Carbon Monoxide (CO)	1-hour 8-hour	35.0 ppm 9.0 ppm	20.0 ppm 9.0 ppm
Nitrogen Dioxide (NO ₂)	1-hour annual	0.05 ppm	 0.25 ppm
Sulphur Dioxide (SO ₂)	1-hour 24-hour annual	0.14 ppm 0.03 ppm	0.5 ppm 0.05 ppm
PM ₁₀	24-hour annual	150 ug/m³ ² 50 ug/m³	50 ug/m³ 30 ug/m³

Source: Air Resources Board Fact Sheet 39, November, 1991.

Table IV-2
Health Effects of Air Pollutants

Air Pollutant	Source	Health Effects
Carbon Monoxide (CO)	Incomplete fuel combustion	Interference with normal oxygen transfer to the blood; oxygen deprivation
Ozone	Photochemical reaction between other pollutants	General respiratory irritation and discomfort
Nitrogen Oxides (NO _x)	Combustion	Respiratory irritation
Sulfur Dioxide (SO ₂)	Combustion of fuels containing sulfur	Upper respiratory irritation; lung tissue injury
Suspended Particulates, (including PM ₁₀)	Industrial, transportation, agricultural, construction activities	Adverse effects on respiratory system

Source: Air Quality and Urban Development, November, 1985.

ppm = parts per million,

² ug/m³ = micrograms per cubic meter.

CURRENT AIR QUALITY CONDITIONS IN THE BASIN

Regional

Unlike many air pollutants, ozone is not emitted directly into the atmosphere, but is produced in the atmosphere by a complex series of photochemical reactions involving reactive organic compounds and nitrogen oxides (NO_x). No single source accounts for most reactive organic gases and NO_x emissions; the many sources are spread throughout the basin. The basin's intense heat and sunlight during the summer months are ideal for formation of ozone. While the basin's peak ozone levels are usually measured at stations near the foot of the San Gabriel Mountains, violations of ozone standards are frequent and widespread throughout the interior portions of the basin.

In contrast to ozone, carbon monoxide (CO) distribution is more localized within the basin, caused primarily by CO from motor vehicles. Ambient CO distributions closely follow spatial and temporal distributions of vehicular traffic, and are strongly influenced by meteorological factors. CO standards are frequently exceeded in those parts of the basin subject to a combination of high traffic density and susceptibility to occurrence of surface based radiation inversions during the winter months.

Suspended particulate matter is a blanket term for a composite of natural and man-made materials, including soil, biological materials, sulfates, nitrates, organic compounds, and lead. Particulates of all sizes, and of diameters smaller than ten microns, termed PM_{10} , attain their highest ambient concentrations well downwind (eastward) of the most densely populated portions of the basin.

The major sources of NO_x are vehicular, residential, and commercial fuel combustion. These compounds also have an important role in the formation of ozone. NO_2 is the most abundant form of ambient NO_x . About one-fifth of the basin, primarily coastal and central Los Angeles County and northern Orange County, is subject to violations of the NO_2 standard.

The use of high sulfur fuels for activities such as electricity generation, petroleum refining, and industrial processes are the major sources of ambient sulfur dioxide (SO_2) . The SO_2 standard is currently being met throughout the basin.

Local Point Sources

The City is located in Source/Receptor Area No. 6 for which ambient air quality is monitored at the South Coast Air Quality Management District (SCAQMD) Monitoring Station in Reseda. Indications of pollutant levels in the City can be obtained from data collected at this station. The most recent three year summary of monitoring data from this station confirms the general severity of ozone and CO problems within the basin (see Table IV-3).

As illustrated in Table IV-3, the federal and State standards for ozone and carbon monoxide (eight hour) have been exceeded numerous times at this station over the past three years.

However, the data demonstrates that air quality is generally improving at this station, and presumably this trend continues in Calabasas. Due to the daily northern sea breeze wind condition described above, it is anticipated that the ambient ozone levels in the City would be lower than those monitored at the Reseda station, which is upwind of the City. In the summertime, these afternoon breezes would carry hydrocarbon and NO_x emissions generated in the south to the northern (inland) portion of the basin, where stagnation occurs and ozone is formed. Ambient concentrations of CO, however, may be different than those monitored at the Reseda station. Since CO is a localized pollutant, areas of the City where traffic volumes are substantial and wind dispersion is minimal (i.e., canyons), there is the potential for violations of the federal and State CO standards.

Toxic Air Contaminants

As a result of the Air Toxics "Hot Spot" Information and Assessment Act of 1987 (AB2588), the SCAQMD is responsible for identifying potential stationary source emitters of toxic air contaminants within the basin and determining the potential of each facility to harm public health. According to their most recent Air Toxics "Hot Spots" Priority Category List, dated February, 1993, there are no known stationary sources within the City that are considered potential emitters of toxic air contaminants.

Table IV-3
Air Pollutant Data Summary
from the Reseda Monitoring Station (1989-1991)

Pollutant	1989	1990	1991	State Standard	Federal Standard
Ozone					
Highest 1-hour Measurement	0.23	0.19	0.22	0.12 ppm ¹	0.09 ppm
No. of Days exceeding Federal Standard	54	41	53		
No. of Days exceeding State Standard	120	108	100		
Carbon Monoxide					
Highest 1-hour Measurement	17.0	19.0	16.0	20.0 ppm	35.0 ppm
No. of Days exceeding Federal Standard (1 hour)	0	0	0		
No. of Days exceeding State Standard (1 hour)	0	0	0		
Highest 8-hour Measurement	12.5	14.9	13.5	9.1 ppm	9.5 ppm
No. of Days exceeding Federal and State Standards (8 hour)	15	11	8		
Nitrogen Dioxide					
Highest 1-hour Measurement	0.18	0.19	0.17	0.25 ppm	••
No. of Days exceeding State Standard	0	0	0		
Sulfur Dioxide					
Highest 24-hour Measurement	.02	.02	NM ³	0.05 ppm	0.14 ppm
No. of Days exceeding State Standard	0	0	NM		

Table IV-3
Air Pollutant Data Summary
from the Reseda Monitoring Station (1989-1991)

Pollutant		1989	1990	1991	State Standard	Federal Standard
Particulates (PM,	0)					
Highest 24-hour Measurement		NM	NM	NM	50 ug/m³ ²	••
No. of Days exceeding State Standard	ng	NM	NM	NM		
Annual Average		NM	NM	NM		
Years exceeding Stat Standard	е	NM	NM	NM		

Source: South Coast Air Quality Management District Monitoring Data, 1989-1991.

Sensitive Receptors

Sensitive receptors in the Calabasas area include land uses that contain segments of the population (i.e., young children, the elderly and persons subject to respiratory complications) that are more susceptible to the effects from local or regional air pollutants than the general populace. These land uses include schools (particularly preschools/nursery schools), convalescent facilities, senior housing projects, and hospitals. The study area does not contain any preschools/nursery schools. Thus, sensitive receptors in the study area consist of schools (see Section III-C), the Woodview Calabasas Hospital, and the Motion Picture and Television Fund facility.

REGULATORY BACKGROUND

The following discussion identifies the federal and State legislation that has been enacted to mandate reductions in air pollutant emissions within the basin. Implementation of these mandates by the SCAQMD and Southern California Association Governments is discussed following the regulatory framework. Finally, a discussion of the City's responsibility for implementing these requirements is provided.

ppm = parts per million

² ug/m³ = micrograms per cubic meter

NM = Pollutant not measured at this station.

Federal

The federal Clean Air Act, as amended in 1990, divides the nation into five categories of planning regions ranging from marginal to extreme. The act also specifies new strategies for attaining federal air quality standards in each category, depending upon the severity of their pollution. New strategies include mandatory annual reductions in air pollutant emissions, progressively more stringent requirements for new stationary air pollutant sources, scheduled introduction of low emitting cars and trucks into the motor vehicle fleet, stringent new tailpipe emission standards for motor vehicles, and development of alternatives to the private automobile as the primary means of transportation. The Clean Air Act has designated the basin as "extreme" for ozone, and requires attainment of the federal ozone standard by 2010. The basin is designated as "serious" for CO, and is required to attain the federal CO standard by 2000. It is also designated "serious" for PM10, and attainment of the Federal standard is required by 2001. SCAG has been designated as the Metropolitan Planning Agency responsible for ensuring basin compliance with the Clean Air Act.

New federal regulations for development projects designed to implement the 1990 Clean Air Act Amendments are currently in preparation at the U.S. Environmental Protection Agency. However, no schedule has been established for the release of these regulations at this time.

Federal Attainment Plan for Carbon Monoxide

In response to the requirements of the Clean Air Act Amendments of 1990, SCAQMD developed an attainment plan for achieving federal carbon monoxide standards. According to the Act, nonattainment areas for carbon monoxide are required to submit an attainment plan by November 15, 1992, which identified attainment of the standard by December 31, 2000.

On November 3, 1992, SCAQMD adopted a Federal Attainment Plan for Carbon Monoxide which identified attainment of the federal standards by 2000. Emissions reduction identified in this Plan are derived from control measures outlined in the 1991 Air Quality Management Plan (discussed below). These control measures are targeted at on and off road sources and transportation/land use sources. However, not all CO control measures identified in the Air Quality Management Plan were needed to demonstrate attainment. These control measures are presented as possible contingency and/or back stop measures.

The federal Attainment Plan has been forwarded to the United States Environmental Protection Agency for their review and approval. Initially, the EPA has determined that the majority of the Plan submittal was complete, however, the contingency measures component of the Plan was deemed incomplete due to the lack of regulatory implementation framework for these measures. Beginning January 15, 1993, the basin is under the 18 month sanction clock and 24 month Federal Implementation Plan clock for failing to provide a complete submittal by November 15, 1992. This means that SCAQMD has 18 months to submit the regulatory framework for the contingency measures to the EPA for acceptance. Also, since SCAQMD did not meet the deadline set in the Act, approval of an attainment plan must be completed within 24 months or the EPA must

begin preparation of a Federal Implementation Plan (described below) which identifies mandates for attainment of the federal carbon monoxide standards. A City can demonstrate compliance with the CO Attainment Plan by demonstrating compliance with the 1991 Air Quality Management Plan (AQMP, described in a following section), which will be incorporated into the Federal Implementation Plan.

Currently, SCAQMD is coordinating with local agencies and districts to identify a regulatory framework for implementation of the contingency measures outlined in the CO Attainment Plan. This effort is expected to be completed by January, 1994.

Federal Implementation Plan

The basin has the worst air quality in the nation and has failed to meet the attainment schedules set up in the federal Clean Air Act, as amended. State Implementation Plans to demonstrate attainment of the federal ozone and carbon monoxide standards were developed in 1972, 1979, and 1982. The EPA has disapproved each of these State Implementation Plans and determined that they were inadequate, however, the EPA has never adopted a Federal Implementation Plan, which is a statutory obligation of the Act when a nonattainment area does not provide an adequate attainment plan.

In 1988, the Coalition for Clean Air and the Sierra Club filed a lawsuit to force the EPA to publish a Federal Implementation Plan for the basin, as required under the Act. In March, 1989, the EPA entered into a settlement agreement with the plaintiffs which obligated them to prepare and publish a Federal Implementation Plan for the Basin.

On November, 1991, the EPA filed a motion with the United States District Court asking it to vacate the settlement agreement and dismiss the case on the basis of the adoption of the federal Clean Air Act Amendments of 1990. The District Court granted the EPA's request and vacated the settlement agreement and dismissed the case. Coalition for Clean Air and the Sierra Club appealed the District Court's decision to the United States Supreme Court.

In February, 1993, the United States Supreme Court reversed the decision of the District Court and the case was remanded to the lower courts for reinstatement of the settlement agreement. As part of the reinstatement of the settlement agreement, the District Court is instructed to establish an expeditious schedule for publication of a final Federal Implementation Plan for ozone and carbon monoxide attainment in the basin. Currently, the SCAQMD, California Air Resources Board, EPA, and the plaintiffs of the case are cooperating in development of the schedule required under the Supreme Court decision. At this time, it is anticipated that the Federal Implementation Plans for ozone and carbon monoxide attainment will incorporate the control measures identified in the 1991 Air Quality Management Plan and the 1992 Federal Attainment Plan for Carbon Monoxide, both developed by the SCAQMD, the SCAG. Thus, Calabasas, by implementing the CO Attainment Plan and the 1991 AQMP will be in conformance with the Federal Implementation Plan.

State

Senate Bill 51, signed into law in 1987, gave the SCAQMD significant new powers designed to improve air quality in the basin. The law instructs SCAQMD to develop new transportation control measures and rules for indirect sources (i.e., facilities that attract a large number of vehicles). SCAQMD has initiated the preparation of an indirect source rule in response to the law. However, this rule has not been completed and has been removed from the rule making calendar, resulting in uncertain adoption of the rule. This rule, when effective, will likely impose controls on major trip attractors, such as regional malls, sports arenas, etc. Until a rule has been enacted by SCAQMD that regulates indirect sources, the primary responsibility rests with the local jurisdiction (i.e., Calabasas), who has the authority to impose restrictions according to local need. SCAQMD is also required to develop further programs and regulations that will increase ride sharing and limit heavy-duty truck traffic on freeways during rush hours.

SCAQMD is provided the authority through Senate Bill 51 to develop further programs and regulations that will increase ride sharing and limit heavy-duty truck traffic on freeways during rush hours. In response, SCAQMD has developed control measures in the 1991 Air Quality Management Plan (see Table IV-4), such as; M-H-5 Enhanced Regulation XV, M-H-2 Trip Reduction for Schools, 1a Persons Work Trip Reduction, 2a Employer Rideshare Incentives, M-H-6 Truck Programs and 3a Truck Dispatching, Rescheduling and Rerouting to implement this authority.

The California Clean Air Act of 1988 requires all air districts in the State to endeavor to achieve and maintain State ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide by the earliest practicable date. California's ambient air standards are generally stricter than national standards for the same pollutants.

Based on pollutant levels, the California Clean Air Act divides non-attainment areas into three categories (moderate, serious, and severe) to which progressively more stringent requirements apply. The Basin is classified as a "severe" non-attainment area for ozone, carbon monoxide, and nitrogen dioxide, which means that it is not expected to attain and maintain the applicable State standards until December 31, 1997, or later. "Severe" non-attainment areas are required to revise their air quality management plans to include specified emission reduction strategies and to meet milestones in implementing emission controls and achieving more healthful air quality. The new control requirements outlined below have been incorporated into the 1991 AQMP. By demonstrating compliance with the AQMP, Calabasas will have incorporated many of the bulleted items listed below. Because the AQMP is designed to be in conformance with the State Clean Air Act, the City will be thus in compliance with this act.

For "severe" non-attainment areas, the new control requirements also include:

- an indirect and area source control program,
- best available retrofit control technology for existing stationary sources,

- a program to mitigate all emissions from new and modified permitted sources,
- transportation control measures (see list in Table IV-4) necessary to attain a 1.5 average passenger vehicle ridership during weekday commute hours, and
- significant use of low emission vehicles by fleet vehicles.

The California Clean Air Act also includes several additional goals and requirements, including reducing district wide emissions, vehicular trips and vehicle miles traveled, as well as ranking control measures by priority and cost effectiveness, no net increase in vehicle emissions after 1997, and a reduction in overall population exposure to ambient pollutant levels in excess of the applicable standards by at least 50 percent of 1986-88 levels by December 31, 2000.

The California Clean Air Act specifies that plans for attaining California standards were to be submitted to the California Air Resources Board by June 30, 1991, and that districts were to focus particular attention on reducing the emissions from transportation and area-wide emissions sources. The Act provides air districts with new authority to regulate indirect sources. As previously stated, a rule to control the indirect sources has been initiated by SCAQMD but has been removed from the District's rulemaking calendar, therefore the adoption schedule for an indirect source rule is unknown. Each district plan is to achieve a five percent annual reduction, averaged over consecutive three year periods, in district wide emissions of each non-attainment pollutant or its precursors unless, despite the inclusion of all feasible measures in the plan and an expeditious adoption schedule, the area is not able to achieve the required five percent annual reduction.

1991 Air Quality Management Plan (AQMP)

The SCAQMD in coordination with SCAG has prepared the 1991 Air Quality Management Plan (AQMP), which is the current regulatory framework for attaining federal and State air quality standards in the basin. In 1991, SCAQMD and SCAG revised the AQMP for the basin to address the requirements of the California Clean Air Act. SCAG and SCAQMD adopted the AQMP on June 6, 1991, and July 12, 1991, respectively.

Upon local adoption, the AQMP was transmitted by SCAQMD to the California Air Resources Board for review and approval. The California Air Resources Board held a public hearing on October, 16, 1992, regarding adoption of the 1991 AQMP. Subsequent to closure of the public hearing, the California Air Resources Board adopted portions of the 1991 AQMP, and conditionally approved the majority of the remainder of the AQMP as adequate to meet the requirements of the California Clean Air Act. The SCAQMD and SCAG were given until July 1, 1993, to provide additional documentation requested as part of the conditional approval.

Pending this approval, the 1991 AQMP is the appropriate planning document for the determination of a project's air quality conformance with the California Clean Air Act under the California Environmental Quality Act (CEQA).

The current 1991 AQMP is a revision of the 1989 AQMP. It is designed to address the requirements of the California Clean Air Act, and identify measures to reduce toxic contaminants and global warming precursors. The 1991 AQMP is similar to the 1989 AQMP; however, the 1991 AQMP includes additional Tier I, II and III control measures, and market based incentive strategies to meet targets for emission reduction. The 1991 AQMP also includes revisions to the 1989 AQMP conformity guidelines.

The short-term, or Tier I, component of the AQMP is action oriented. Tier I measures are outlined in Table IV-4. It identifies specific control measures for which control technology presently exists. These measures consist mainly of stationary source controls that will be the subject of SCAQMD rule making, California Air Resources Board adopted motor vehicle emissions standards and fuel specifications, and federally adopted programs to reduce emissions from sources under federal jurisdiction. A city such as Calabasas is required to adopt all feasible Tier I measures, as well as provide documentation for why Tier I measures not adopted were considered to be infeasible.

Tier II measures are composed primarily of the extension or more stringent application of Tier I control measures. Emission reduction strategies for solvent reformulation and nonpolluting power generation and energy storage will require additional research and development efforts beyond those currently proposed under Tier I. The use of stricter standards, such as emission charges and growth management measures, will need to be developed to bring about the technical advancements necessary to achieve Tier II goals.

Tier III measures depend on substantial technological advancements and breakthroughs that are expected to occur throughout the next two decades. This requires an aggressive expansion of Tier II research and development efforts. After achieving Tier II goals, Tier III measures must be implemented on an accelerated schedule to achieve attainment as early as feasible.

According to the 1991 AQMP, attainment of all federal health standards is to occur no later than the year 2000 for CO and NO_x dioxide, 2005 for PM_{10} and 2010 for ozone. State standards are to be attained no later than the year 2000 for NO_x and 2010 for CO. State standards for ozone and PM_{10} are not to be achieved until after 2010. It should be noted that the State standards for ozone and PM_{10} cannot be attained with full implementation of the current AQMP, and that future AQMP revisions will need to identify additional control measures to attain these standards.

The AQMP measures exceed the emission reduction requirements of the California Clean Air Act in terms of per capita pollutant exposure, but the measures will not serve to meet the five percent per year emission reduction requirements in the California Clean Air Act. The California Clean Air Act also requires that per capita exposure to unhealthful pollutant levels be reduced by 25 percent in 1994, by 40 percent in 1997, and by 50 percent in 2000. The AQMP measures meet this second requirement for ozone, carbon monoxide and nitrogen dioxide. Thus, although the Plan does not meet the California Clean Air Act target for a five percent emissions reduction per year, the Plan achieves the California Clean Air Act alternate target of emissions reductions to the "maximum extent feasible." In order to achieve the federal and State ambient air quality standards, the 1991 AQMP outlines a variety of control measures that should be implemented by local agencies, in conjunction with the SCAQMD and other agencies. A list of those measures is provided in Table IV-4. The measures identified in Table IV-4 include measures to reduce emissions from indirect sources, as well as Transportation Control Measures to reduce emissions from mobile sources.

Table IV-4
1991 AQMP Local Government Control (Tier I) Measures

AQMP Control Measure No.	Title 2		
A-D-2	Control of emissions from swimming pool heating		
A-D-3	Control of emissions from residential and commercial water heating		
A-E-3	Control of dust from agricultural tilling		
A-F-2	Control of emissions from construction and demolition activities and on-site vehicular flow		
A-F-4	Low emission methods and materials for building construction		
A-F-5	Control of dust emissions from wind erosion		
E-C-1a/2b	Commercial electricity/natural gas conservation		
E-C- 2a/2b/2c/2d	Industrial electricity/natural gas conservation and glass/paper recycling		
E-C-3	Local government conservation		
E-D-1a/1b	Residential electricity/natural gas conservation		
M-G-6	Eliminate excessive car dealership cold starts		
M-G-7	Eliminate excessive curb idling		
M-G-9	Eliminate emissions from advertising vehicles		
M-H-1	Environmental review program		
M-H-2	Trip reduction for schools		
M-H-3	Supplemental development standards		
M-H-4	Special activity centers		
M-H-5	Enhanced Regulation XV		
M-H-6	Truck programs		
M-H-7	Registration program		
M-I-7	Eliminate leaf blowers		
1a	Persons work trip reduction		
1b	Non-motorized transportation		
2a	Employer rideshare and transit incentives		

Table IV-4
1991 AQMP Local Government Control (Tier I) Measures

QMP Control Measure No.	Title
2b	Parking management
2d	Merchant transportation incentives
2e	Auto use restrictions
2f	HOV facilities
2g	Transit improvements
3a	Truck dispatching rescheduling and rerouting
4	Traffic flow improvements
5	Non-recurrent congestion
12a	Paved roads
12b	Unpaved roads
13	Freeway and highway capacity
16	High speed rail
17	Growth management

Source: 1991 Air Quality Management Plan

The 1991 AQMP was designed to comply with the California Clean Air Act and the federal Clean Air Act Amendments of 1977. Due to the timing of adoption of the 1990 Clean Air Act Amendments, the implementation of the requirements of these amendments has not been directly assessed in the 1991 AQMP. Simply stated, the authority and regulations contained in the numerous federal and State air quality programs have been channeled into the AQMP, which serves to implement the various legal requirements. Therefore, to the extent that the City of Calabasas complies with the AQMP, it will also comply with the requirements of the California Clean Air and the federal Clean Air Act Amendments of 1977. Upon publication of a Federal Implementation Plan or equivalent document which identifies measures to comply with the federal Clean Air and its 1990 Amendments, the 1991 AQMP is the appropriate document for identifying control measures which have been identified for implementation by local agencies. Compliance of the Air Quality Element of the General Plan is ultimately determined by SCAG, who will examine the AQMP control measures (see Table IV-4), implementation actions, and schedule adopted by the City for conformity with the goals, policies and objectives of the AQMP.

OTHER REGIONAL PLANS

The AQMP is complementary to two other planning documents developed by SCAG: the Growth Management Plan and the Regional Mobility Plan.

GROWTH MANAGEMENT PLAN

As discussed in the Growth Management Plan, the underlying premise for the land use measures is that trips and mode choices are not only a function of the transportation system, but are also functions of housing density, the locations of land uses, and the way land uses relate to the transportation system. The Growth Management Plan identifies existing and projected demographic trends for 26 subregions within the basin, with Calabasas located in the Santa Monica Mountains subregion. According to the Growth Management Plan, this subregion had a jobs/housing ratio of 0.62 in 1984 and is projected to have a ratio of 0.74 by the year 2010. This ratio refers to the number of jobs in the subregion compared to the number of residential units, and is an indicator of the subregion's demographic "balance". A subregion has a balance of jobs and housing when there are adequate job opportunities for residents, or dwelling units for employees, or an average ratio of 1.27 jobs for every residential unit in 1984 or 1.22 in 2010. Job rich subregions have a ratio greater than the average, and housing rich subregions have ratios lower than the average. Thus, the Santa Monica Mountains subregion is considered housing rich. Table IV-5 provides additional demographic information regarding the subregions as identified in the Growth Management Plan.

Table IV-5
Growth Management Plan Projections
for Santa Monica Mountains Subregion

	1984	1988	2010
Population	58,100	88,400	106,400
Housing	21,300	30,200	42,900
Employment	13,200	N/A	31,800
Job/Housing Ratio	0.62	**	0.74

Source: Growth Management Plan, 1989.

The Growth Management Plan identifies the following potential strategies, which can be implemented by local agencies to reach the performance goals outlined in the Growth Management Plan:

- Require mitigation measures for proposals that worsen a subregion's jobs/housing balance.
- Establish local priorities for building infrastructure that supports job/housing balance.
- Locate new major facilities that are job inducing in job poor subregions.
- Identify growth industries and attract them with incentives.
- Educate and train workers so that businesses can find an appropriate labor force in relocation areas.
- Encourage housing development in job rich subregions by giving developers additional incentives.
- Reduce limitations on housing construction in job rich areas.
- Link transportation demand management measures to jobs/housing balance measures.

SCAG expects local jurisdictions, such as Calabasas, to comply with applicable and feasible performance goals outlined in the Growth Management Plan. However, these performance goals must also balance with local community values.

REGIONAL MOBILITY PLAN

Recommended transportation improvements focus on implementation of the Regional Mobility Plan, which is incorporated in the AQMP, and includes infrastructure improvements, bus system expansion, high occupancy vehicle lanes, traffic signal synchronization, and traffic pattern optimization. According to the Regional Mobility Plan, proposed projects in the vicinity of Calabasas include: construction of the Los Angeles to Ventura Commuter Rail line and two high occupancy vehicle lanes on State Route 101.

It should be noted that SCAG is currently in the process of developing a Regional Comprehensive Plan, which includes growth management and regional mobility elements. The proposed Regional Comprehensive Plan and its elements, once adopted by SCAG, would supersede the direction outlined above regarding the Growth Management Plan and Regional Mobility Plan. Circulation of a Draft Regional Comprehensive Plan is expected by the summer of 1993.

C. BIOTIC RESOURCES

This section reviews biological resources in the Calabasas study area. It inventories local flora and wildlife. The section also examines sensitive resources and species and identifies other biological issues. In addition, Appendix B contains a list of references utilized in determining the resources in the study area, the definitions of the legal status categories for sensitive biological resources, and descriptions of sensitive species and species of local concern. Appendix B also includes a complete discussion of the regulatory processes, permitting issues, and regulatory compliance issues relevant to biological resources in the study area.

FLORA

The following plant communities may be found within the Calabasas General Plan study area.

- Riparian woodland;
- Riparian scrub;
- Sycamore-alder riparian woodland;
- Southern coast live oak riparian forest;
- Other riparian areas, such as seeps and springs;
- Southern oak woodland:
- Valley oak woodland;
- California walnut woodland;
- Chaparral;
- Coastal sage scrub:
- Grasslands:
- Disturbed (ruderal); and
- Rock Outcrops

The above inventory of plant communities was obtained from a number of planning and environmental studies conducted in Calabasas. There are additional habitats identified in the various documents, such as grazed coastal sage scrub, overgrazed grassland, and coastal sage perennial grassland mosaic, that are not generally recognized as distinct habitat types. In addition, these areas are generally limited to specific locations and, therefore, are not included in this discussion of the overall resources of the Calabasas General Plan study area. The locations of plant communities in the study area are indicated on the Plant Communities Map located in the map pocket at the end of this document.

There may be additional habitats that have not been described because they are not found within the limits of the projects for which there is documentation. There may also be habitats that are identical to those on the above inventory, but have different names, such as oak woodland or southern oak woodland which comprise the southern coast live oak riparian forest.

The description of plant communities below is taken from Raven, et al. (1986) and Holland (1986). The sensitivity of these plant communities is described in the following section, Sensitive Plant Communities.

Riparian Woodland

Riparian woodland is used as a general term for woody plant communities found along streams and drainage channels. Physical characteristics of these communities include moist to saturated soils, water table levels near the surface or water at the surface during or part, of the year. Typical species include woody species such as alder (Alnus rhombifolia), willows (Salix spp.), cottonwoods (Populus spp.), and sycamore (Platanus racemosa). Herbaceous species include cattails (Typha spp.) and currants (Ribes spp.).

Riparian Scrub

Riparian scrub is similar to riparian woodland, except that the dominant species are scrub species, rather than trees. This habitat is characterized by low growing shrubs and scrubby trees such as sandbar willow (Salix hindsiana) and scrub oak (Quercus dumosa). Taller tree species, such coast live oak (Quercus agrifolia) and red willow (Salix laevigata) are not common, or dominant, in this habitat. The physical characteristics, such as soils and hydrological conditions, of these areas are similar, although riparian scrub can tolerate slightly drier conditions than riparian woodlands. Dominant species in this habitat include mulefat or baccharis (Baccharis spp.), short-statured willow trees such as sandbar willow, and young or emergent cottonwoods and willows.

Southern Sycamore Alder Riparian Woodland

Southern sycamore alder riparian woodland is a tall, open, broadleafed, winter-deciduous streamside woodland, growing along very rocky stream courses that are subject to seasonally high intensity flooding. The woodland is dominated by sycamore and alder. This habitat seldom has a closed canopy and in fact can be found as scattered trees in a scrub habitat. Understory species include poison oak and California blackberry (Rubus ursinus), bigleaf maple (Acer macrophyllum), stinging nettle (Urtica holosericea) and horsetail (Equisetum hyemale).

Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest is similar to riparian woodland, with the added element of oak trees (*Quercus* spp). Typically, southern coast live oak riparian forest extends out further from the direct line of the drainage as opposed to riparian woodland habitat, because oaks have a higher tolerance for drought conditions than most riparian species.

Other Riparian Areas, such as Seeps and Springs

Other riparian areas include alkaline seeps, springs and other areas that have water at or near the surface. These are areas where the water table is high, but aboveground flow is so little that no significant channel or channelization forms. These areas tend to be small and generally support small herbaceous species that are water dependent, such as some species of monkeyflower (*Mimulus* spp. and *Diplacus* spp.), cattails and hedge-nettle (*Stachys* spp.). These areas may also occasionally support larger, woodier plants such as mulefat or baccharis.

Southern Oak Woodland

Southern oak woodland is characterized by a relatively open canopy, with trees concentrated near but not necessarily confined to a streamcourse or riparian area. Oak woodland can occur on the hillside along a deeply incised drainage, but they are generally found on gentle to moderately steep slopes with moist, deep soils. Oak species predominate in this habitat, but other tree species include California bay (*Umbellularia californica*) and California walnut (*Juglans californica*). Shrubby understory species include poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*) and Mexican elderberry (*Sambucus mexicanus*).

Valley Oak Woodland

Valley oak woodland is a more open habitat than southern oak woodland, forming more of a savannah with a grassy understory than a closed woodland. This type of community is also referred to as a savannah woodland, although savannah woodlands can be dominated by other tree species in place of valley oak (*Quercus lobata*), including coast live oak, sycamore (*Platanus racemosa*) and similar large tree species. Physical characteristics are deep, well-drained alluvial soils, usually in valley bottoms. Valley oak is usually the only tree species present, with an understory of grass species such as wild oats and brome grasses. Other species found in this habitat include poison oak and rye-grass (*Elymus* spp.).

California Walnut Woodland

Walnut woodland exhibits characteristics similar to oak woodland, with the exception that walnut is the dominant species. In the Santa Monica Mountains, the California walnut is dominant, with an understory of toyon, holly-leaved cherry (*Prunus ilicifolia*), coffee berry (*Rhamnus californica*), chamise (*Adenostoma fasciculatum*) and ceanothus (*Ceanothus* spp.).

Chaparral

Chaparral is composed of hardy, woody evergreen shrubs that can form a dense, nearly impenetrable scrub. This community is generally found at higher elevations than coastal sage scrub, usually on deeper, heavier soils with a moderate moisture content. However, chaparral vegetation at lower elevations can be found on dry ridges with gravelly, shallow soils.

Chaparral is a fire-adapted community, which means that the plant species that form the community have evolved mechanisms for coping with fire and heat. These mechanisms include stump-sprouting and seeds with durable coats. Stump-sprouting species have a large stump or burl that is not killed by burning. In these species, when a fire burns the shrub back to the stump, the plant sprouts new growth from tissue on the burned stump.

Other species have evolved seeds that have durable coats. In these species, the adult plants are completely killed by fire, but the seeds are unharmed because the seed coat is thick and protects the living tissue inside. In many of these species, the seed coat is so thick that burning is required to scarify or crack the coat so that germination can take place.

The adaptation of the chaparral community to fire has progressed to the point where regular burning is required in order to maintain a healthy and vigorous population. Burning insures the conversion of dead wood into ash, resulting in the recycling of nutrients back into the soil. Burning also clears the ground of dense undergrowth and allows for the growth of seedlings and wildflowers that is suppressed in mature chaparral communities.

Chaparral takes a variety of forms, depending upon the dominant species. Raven, et al., identifies five different associations that may be based on different environmental conditions and post-fire succession stages: chamisal chaparral and red shank chaparral, found on low elevation south-facing slopes with shallow soils; ceanothus chaparral, common in recently burned areas; oak chaparral, found on moister, generally north-facing slopes; and mixed chaparral, the mature form found in deep soils.

With the exception of the mixed chaparral, each of the plant associations is characterized by a dominant species, such as chamise. However, the general species composition of the scrub component is fairly consistent, varying only in the relative dominance of each species. Typical scrub species in all chaparral communities include ceanothus, toyon, and scrub oak (*Quercus dumosa*), manzanita (*Arctostaphylos* spp.), coffeeberry, sugar bush (*Rhamnus crocea*), buckthorn (*Rhamnus* spp.) and holly-leaved cherry.

Coastal Sage Scrub

Coastal sage scrub is a lower elevation plant community, generally occurring on dry slopes below chaparral. It is composed of subshrubs or shrubs that are deciduous and not as stiff branched as chaparral plants tend to be. In the Santa Monica Mountains, the coastal sage scrub has a dense canopy, with little herbaceous ground cover. Typical species include California sagebrush (Artemisia californica), sages (Salvia spp.), California brittlebush (Encelia californica), laurel sumac (Malosma laurina), monkeyflower and buckwheat or eriogonum (Eriogonum spp.).

Grasslands

Grasslands form on deep soils, usually on fairly level terrain. The soil moisture can range from moist to almost saturated. Most of the native grasslands in the Santa Monica Mountains have been replaced by annual grasslands over time.

Annual grasslands are typically described as an introduced plant community containing primarily annual weedy species such as wild oats (Avena spp.), black mustard (Brassica nigra), brome grasses (Bromus spp.) and abu-mashi (Schismus barbatus). Other species include herbaceous wildflowers such as baby blue eyes (Nemophila menziesii), lupines (Lupinus spp.), owl's clover (Orthocarpus purpurascens) and blue dicks (Dichelostemma pulchella).

Native grassland contain perennial grasses such as needlegrass (*Stipa* spp.), bluegrass (*Poa* spp.), and herbaceous natives such as owl's clover, blue dicks, blue-eyed grass (*Sisyrinchium bellum*) and others.

Disturbed or Ruderal Weedy

Disturbed or ruderal weedy plant communities are typified by the presence of large areas of disturbance and excessive weedy growth. Vacant lots are typically occupied by ruderal plant communities with the common species being mustard, brome grasses, wild oats and filaree (*Erodium* spp.). The soil and other physical characteristics are variable, depending to a large degree upon the original plant community present before the disturbed community moved in. The prominent vegetative characteristics are the presence of non-native or native weedy species, with low species diversity but high numbers of individuals within a species.

Rock Outcrops

Rock outcrops, while sometimes having a separate suite of plant species associated with them, do not commonly have other characteristics (soil, slope, elevational limits) that help to define plant communities. As a result, they do not have a consistent set of floral characteristics. In other words, rock outcrop floras vary depending upon what plant community the rock outcrop is located in. Therefore, rock outcrops are not generally treated as a separate plant community. They can, however, function as a separate wildlife habitat much in the way that caves, old buildings and cultivated trees do, in that they attract wildlife with a particular need for shelter, basking, or foraging sites that are not defined by the plant species present, but rather the physical characteristics of the habitat.

WILDLIFE

The Santa Monica Mountains support a variety of wildlife species. The composition of the species present in a given area is dependent upon the plant community present, the availability of water and forage, and the time of the year for some species. A matrix of wildlife species in the study area and their habitats is found in Table IV-6.

Riparian and oak woodland habitats support a variety of bird species, especially raptors such as barn owl, great horned owl and Cooper's hawk. Flickers and woodpeckers use the larger trees in the oak woodland along with smaller passerines such as Wilson's warbler, Hutton's vireo, black-headed grosbeak, hooded oriole and Nashville warbler. Other animal species that use these habitats include the amphibians such as western toads and Pacific trees frogs, reptiles such as Pacific slender salamanders and ensatina salamanders, and mammals such as dusky-footed woodrat and mule deer.

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Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	VOW	cww	CHP	CSS	NG	AG	DIST	RO
Ensatina	Х	Х	Х	Х	Х	Х		Х	Х					
Arboreal salamander*				Х	Х									
Garden slender salamander*	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	
Western toad*	X	Х	X	Х	Х	Х	Х	Х		Х	Х	Х		
California treefrog*	Х	Х	X	Х	Х									
Pacific treefrog*	Х	Х	Х	Х	X	х	Х	Х	X	X	Х	Х	X	
Western fence lizard	X	Х	X	Х		Х	Х	X	Х	×	Х	Х	Х	Х
Side-blotched lizard	X	Х	Х	Х	Х	Х	Х	X	Х	X	Х	X	Х	Х
Western skink									Х	Х	X	Х		Х
Western whiptail	Х					Х	Х		Х	X		Х	X	Х
Southern alligator lizard			Х	Х		Х	Х		Х		X	Х	Х	
Western blind snake	Х	Х	Х	Х		Х	Х	X	Х	×				
Western yellow-bellied racer						Х	Х	Х	Х	Х	X	Х		Х
Coachwhip						X	Х	X		Х		Х	Х	Х
California whipsnake						X	х	X	Х	Х				Х
Gopher snake						X	Х	Х	Х	Х	Х	Х	Х	Х
California kingsnake*	Х	Х	X	Х	Х	Х	Х	×	Х	Х	Х	Х	Х	Х
California black-headed snake						×	×		Х	Х	Х	Х		Х
California lyre snake						Х			Х	×				Х

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	. RO
Night snake						Х	X	Х	Х	Х	Х	Х		
Southern Pacific rattlesnake	X	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х
Killdeer											F,R,N	F,R,N		
Turkey vulture	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N,	F,R,N	F	F	F	F	F,R,N
Red-shouldered hawk	F,R,N	F	F,R,N	F,R,N		F	F	F						
Red-tailed hawk	F,R,N	F	F,R,N			F,R,N	F,R,N	F,R,N	F	F	F	F	F	F,R,N
American kestrel	F,R,N	F	F,R,N	R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F,N	
California quail	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F	F	F,R,N	
Band-tailed pigeon	F	F	F	F,R,N		F,R,N	F,R,N	F,R					F,R	
Rock dove											F,R,N	F,R,N	F,R,N	R,N,
Mourning dove					F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	
Greater roadrunner						F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F
Barn owl	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F,R,N	F,R,N
Great horned owl	F,R,N	F,R	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F	F	F	F	F	F,R,N
Western screech-owl	F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N						
Common poorwill									F,R,N	F,R,N	F	F		F,R,N
White-throated swift	F	F	F	F	F	F	F	F	F	F	F	F	F	F,R,N

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	··· VOW	cww	CHP	CSS	NG	AG	DIST	RO
Black-chinned hummingbird	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	**************************************		Otti	000	NG	- 74	F	
Costa's hummingbird			F,R,N			F				F,R,N	F,R,N			F	
Anna's hummingbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R	F			F	
Rufous hummingbird	Migrant only	F,R	F,R	F,R	F,R	F	F,R		F,R	F,R	F,R,			F	
Allen's hummingbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N				F,R,N	
Northern flicker		F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F,R	F,R	F	F	F	
Acorn woodpecker		F,R,N		F,R,N	F,R,N		F,R,N	F,R,N	F					F,R,N	
Lewis' woodpecker	Winter only	F,R		F,R	F,R		F,R	F,R	F,R						
Red-breasted sapsucker	Winter only	F,R		F,R	F,R		F,R	F,R	F,R						
Downy woodpecker		F,R,N	F	F,R,N	F,R,N		F,R		F,R					F,R	
Hairy woodpecker		F,R,N		F,R,N	F,R,N		F,R		F,R						
Nuttall's woodpecker		F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N						
Western kingbird	Summer only			F,R,N			F,R,N	F,R,N	F,R,N	F	F	F,R,N	F,R,N		
Cassin's kingbird	Summer only			F,R,N			F,R,N	F,R,N				F,R,N	F,R,N		
Ash-throated flycatcher	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N				
Western wood-pewee	Summer only	F,R,N	F	F,R,N	F,R,N	F	F		F						
Black phoebe*		F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N						
Say's phoebe						F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N
Pacific-slope flycatcher	Summer only	F,R,N	F	F,R,N	F,R,N	F	F	F	F	F	F				

Table IV-6
Wildlife Species and Habitat Matrix

Species Species	e e est estado	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Violet-green swallow*	Summer only	F,R,N	F	F,R,N	F,R,N	F	F	F	F	F	F	F	F	F	F,R,N
Northern rough-winged swallo	Summer only	F,R,N	F,R,N	F,R,N	F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F
Cliff swallow*	Summer only	F,R,N	F	F,R,N	F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F,R,N
Barn swallow*	Summer only	F	F		F	F	F	F,R,N	F	F	F	F,R,N	F,R,N	F,R,N	F
Scrub jay		F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R			F,R,N	
American crow		F,R,N	F	F,R,N	F,R,N		F,R,N	F,R,N	F,R,N	F,R	F,R	F,R	F,R	F,R,N	
Common raven		F,R,N	F	F,R,N	F,R,N		F,R,N								
Wrentit		F,R,N	F,R,N			F				F,R,N	F,R,N			F,R,N	
Plain titmouse		F,R,N	F	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F					
Bushtit		F,R,N	F,R,N	F,R,N	F,R,N		F,R,N		F,R,N	F,R,N	F,R,N			F,R,N	
White-breasted nuthatch		F,R,N		F,R,N	F,R,N		F,R,N	F,R,N	F						
House wren		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N			F,R,N	
Bewick's wren		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N		F,R,N	F,R,N	F,R,N			F,R,N	
Canyon wren										F,R,N	F,R,N				F,R,N
Ruby-crowned kinglet	Winter only	F,R	F,R	F,R	F,R	F	F,R	F,R	F,R					F,R	
Blue-gray gnatcatcher		F,R	F,R	F,R					F,R	F,R,N	F,R				
Western bluebird			F	F,R,N			F,R,N	F,R,N	F		F	F	F		
Hermit thrush	Winter only	F,R	F	F,R	F,R	F				F,R					

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Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	ss	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Varied thrush	Winter only	F,R			F,R	F									
American robin		F,R,N	F	F,R,N	F,R,N	F	F,R	F,R	F,R	F	F	F	F	F,R,N	
Northern mockingbird		F,R,N	F	F,R,N			F,R,N	F,R,N	F,R,N	F,R	F,R	F	F	F,R,N	
California thrasher		F,R,N	F,R,N			F				F,R,N	F,R,N				
Water pipit	Winter only											F	F	F	
Cedar waxwing	Winter only	F,R		F,R	F,R		F,R		F,R					F,R	
Phainopepla		F,R,N		F,R,N	F,R,N		F,R	F,R,N	F,R	F	F				
European starling		F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F	F	F	F	F,R,N	F,R
Hutton's vireo		F,R,N	F	F,R,N	F,R,N	F	F,R,N								
Warbling vireo	Summer only	F,R,N	F	F,R,N	F,R,N	F									
Orange-crowned warbler		F,R,N	F	F,R,N	F,R,N	F	F,R,N			F,R,N	F,R				
Yellow-rumped warbler	Winter only	F,R	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R	F	F	F,R	
Black-throated g rey warbler	Summer only	F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R	F,R						
Townsend's warbler	Winter only	F,R	F	F,R	F,R	F	F,R	F,R	F,R						
Hermit warbler	Migrant only	F,R		F,R	F,R	F	F,R	F,R	F,R						
MacGillvray's warbler	Migrant only	F,R	F,R	F,R	F,R	F									
Wilson's warbler	Migrant only	F,R	F,R	F,R		F									
Common yellowthroat		F,R,N	F,R,N	F,R,N	F,R,N	F,R								F	

Table IV-6
Wildlife Species and Habitat Matrix

Species		RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG I	- AG	DIST	DO
Black-headed grosbeak	Summer only	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R	F,R	F,R	F,R	033	NG	· AG	DIST	RO
Blue grosbeak	Summer only	F,R,N	F,R,N	F,R,N	F.R	F	F,R	F,R	F,R	F,R	F,R			5.5	
Lazuli bunting	Summer only	F,R,N	F,R,N	F,R,N	F,R	F	F,R	F,R,N	F,R	F,R,N	F,R,N			F,R	
Rufous-sided towhee		F,R,N	F,R,N	F,R,N	F,R,N	F	.,	1,11,11	F,R	F,R,N	F,R			E D AL	
California towhee		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R	F,R,N	F,R,N	F,R,N			F,R,N F,R,N	
Savannah sparrow	Winter only					F	.,.,.	F,R	7,1,14	7,11,14	1,11,14	F,R	F,R		F,R
Song sparrow*		F,R,N	F,R,N	F,R,N	F,R,N	F		1,11		F,R,N	F,R,N	F,N	F,N	F,R	
Lark sparrow					77.77	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	5.0
Chipping sparrow					F,R,N	F	F,R,N	7,1,1	F,R	1,11,14	1,11,14	1,11,14	F,R,N	F,R,N F,R,N	F,R
Dark-eyed junco		F,R	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R			F,R,N	
White-crowned sparrow	Winter only	F,R,	F,R	F,R	F,R	F	F,R	F,R	F,R	F,R	F,R	F	F	F,R	
Fox sparrow	Winter only	F,R	F,R	F,R	F,R		.,,.	- 7,1	1,	F,R	F,R		'	F,R	
Lincoln's sparrow	Winter only	F,R	F,R	F,R		F				F,R	7,11			F,R	
Western meadowlark								F,R,N		. ,,,		F,R,N	F,R,N	F,R	
Red-winged blackbird*			F,R,N			F,R,N					F,R,N	. ,,	F,R,N	F,R,N	
Brewer's blackbird							F,R,N	F,R,N	F,R,N		F,R,N		F,R,N	F,R,N	
Brown-headed cowbird		F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F	F.	F,R,N	
Northern oriole	Summer only	-	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R	,,,,,,			F,R,N	
Hooded oriole	Summer only			F,R,N	F,R	F	F,R	F,R	F,R	- /				F,R,N	

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Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	sow	vow	cww	CHP	CSS	NG	AG	DIST	RO
Western tanager Migrant only	F,R	F	F,R	F,R	F	F,R	F,R	F,R						
American goldfinch	F,R,N	F,R,N	F,R,N	F,R,N	F	F,R,N	F,R	F,R	F,R	F,R	F	F	F,R,N	
Lesser goldfinch	F,R,N	F,R	F,R,N	F,R,N	F	F,R,N	F,R,N	F,R,N	F,R,N	F,R,N	F	F	F,R,N	
Lawrence's goldfinch	F,R,N		F,R,N		F				F,R,N	F,R,N	F	F	F,R	
Purple finch	F,R	F	F,R	F,R,N	F	F,R,N	F,R	F,R	F	F			F,R	
House finch	F,R,N	F	F,R,N	F,R	F	F	F,R,N							
Opossum	×	Х	Х	Х	Х	Х	Х	Х	Х	х			Х	
Ornate shrew	X	Х	Х	Х	Х	X	Х	Х		Х	Х	Х		
Gray shrew							Х		Х	х				
California mole	X	Х	Х	Х	Х				Х					
Little brown myotis	X	X	Х	Х	X	Х		Х					Х	X
California myotis	Х	Х	Х	X	Х	X	X	X	х	×			Х	X
Yuma myotis	Х	X	Х	Х	Х	X	Х	Х	х	Х			Х	X
Hoary bat	Х	Х	Х	Х	Х	Х	Х	Х						Х
Red bat	Х	Х	Х	Х	X	Х		Х						
Big brown bat	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X
Western pipistrelle					Х	Х	X	Х	Х	х	Х	X	Х	X
Audubon cottontail	Х	Х	Х		Х		X	X	Х	Х	Х	X	Х	
Brush rabbit									Х	Х				

Table IV-6 Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	SOW	VOW	CWW*	CHP	CSS	NG	AG	DIST	RO
Beechey ground squirrel							X			Х	Х	Х	Х	Х
Western gray squirrel				Х		Х	Х	Х						
Southern pocket gopher	Х	Х	X	Х	Х	×	Х	Х	Х	Х	Х	Х	X	
California pocket mouse					Х	×	Х		X	Х				
Pacific kangaroo rat									Х	X				
Western harvest mouse*	X	Х							Х	Х	Х	Х		
California mouse				Х		X			Х	X				
Brush mouse					X				X	X				Х
Deer mouse	X	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	
Dusky-footed woodrat	X	Х	Х	Х	Х	Х			Х	X				
California meadow mouse							Х				X	X	X	
Norway rat													×	
House mouse											Х	Х	X	
Mule deer	X	Х	Х	Х	Х	X	Х	X	Х	X	X	X		
Gray fox	X	X	X	X	Х	X	Х	X	Х	X	X			X
Coyote	X	Х	Х		Х	Х	Х	X	Х	X	X	Х	X	X
Raccoon*	X	Х	X	Х	Х								Х	
Ringtail*	X	Х	X		Х				Х	X				X
Long-tailed weasel*	X	X	Х	Х	Х	Х	Х	Х	X	X	X	X	Х	X

Table IV-6
Wildlife Species and Habitat Matrix

Species	RW	RS	SARW	SCLO	SS	SOW	VOW	cww.	СНР	CSS	NG	AG	DIST	RO
Badger											Х	Х		
Striped skunk	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	Х	Х
Spotted skunk*	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х				Х
Mountain lion	Х	Х	Х	Х	Х				Х	Х				
Bobcat	Х	Х	×	Х	Х				Х	Х				

Annual (Non-native) grasslands

Source: LSA Associates, 1992.

Riparian woodland

LEGEND

RW

RS	Riparian scrub		DIST Disturbed (ruderal)
SARW	Sycamore-alder riparian woodland		RO Rock outcrops
SCLO	Southern coast live oak riparian forest		
SS	Other riparian areas such as seeps and springs	X	Resident
sow	Southern oak woodland		B Breeding
VOW	Valley oak woodland	F	Foraging
CWW	California walnut woodland	N	Nesting
CHP	Chaparral	R	Roosting
CSS	Coastal sage scrub		Typically found along streams, lakes and ponds in these habitats.
NG	Native grasslands		

AG

Coastal sage scrub, chaparral and rock outcrops tend to support similar species, with such reptiles as western fence lizard, western whiptail, western rattlesnake and gopher snakes; birds such as towhees, sparrows, California thrasher, bushtit and wrentit; and mammals such as bats, woodrats, mule deer and bobcat.

Grassland habitats support mostly ground dwelling species, including reptiles such as the horned lizard; birds such as blackbirds, cowbirds, horned lark and mourning dove; and mammals such as black-tailed jackrabbit, Beechey ground squirrel and the Audubon cottontail. The golden eagle, red-tailed hawk and northern harrier forage over grasslands as well.

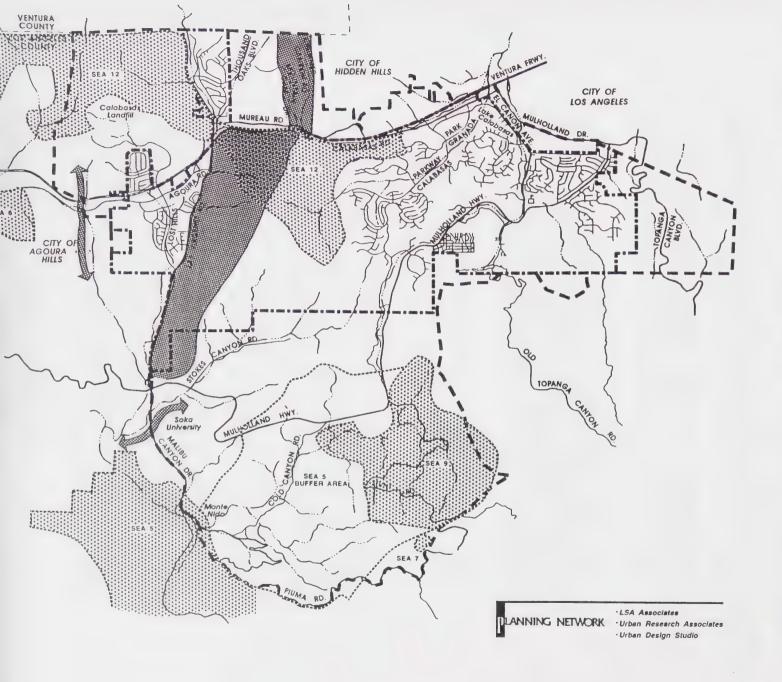
Ubiquitous animal species would include the American crow, common raven, northern mockingbird, house finch and side-blotched lizard.

Another biological resource of special concern in the Santa Monica Mountains areas is the preservation of wildlife corridors. The National Park Service, California Department of Fish and Game and the Santa Monica Mountains Conservancy have all expressed concerns about the adverse effects of urbanization, particularly in areas functioning as movement corridors.

Wildlife corridors are important for three main reasons. The first reason is that they allow movement through all habitat areas suitable for use by a species, even those areas not currently being used. The second reason is that corridors allow for recolonization of areas which were historically occupied but from which the species has been extirpated. The third reason is that corridors allow the exchange of genetic material to occur between populations, which is important in preserving genetic diversity within and between populations (Impact Sciences, 1982b).

The City of Calabasas is located at a crucial crossroads of habitat linkages. These linkages are indicated on Figure IV-1. It lies between the Santa Monica Mountains and the Simi Hills, and contains linkages connecting the Santa Monica Mountains, Simi Hills, Santa Susana Mountains, Los Padres National Forest and the Angeles National Forest. By far the largest protected habitat for wildlife species of concern are the San Gabriel Mountains. This is important because the wildlife linkages in Calabasas ultimately connect to the San Gabriel via the various mountain ranges. The San Gabriel Mountains are the largest protected habitat for wildlife species of concern and is important for Calabasas. If this reservoir of wildlife is destroyed, it is possible that some species now crossing into or using the Calabasas area will disappear.

Because of the fragmentation of habitats due to freeways, roads, housing development and other urban related barriers, the remaining linkages within the City of Calabasas need to be preserved. Studies by a research team from the California State University, Northridge (1987) has identified three "choke points" that constrain wildlife movement to a small narrow corridor. The "choke points" are the I-5 and S.R. 14 Freeway junction, the S.R. 118 and Topanga Boulevard area and the Ventura Freeway area between the Simi Hills and the Santa Monica Mountains.





CITY OF CALABASAS GENERAL PLAN

FIGURE IV-1

SIGNIFICANT ECOLOGICAL AREAS WITH SENSITIVE BIOLOGICAL RESOURCES

LEGEND



CITY LIMITS



SPHERE OF INFLUENCE



WILDLIFE LINKAGES/CORRIDORS



LOS ANGELES COUNTY
DESIGNATED SIGNIFICANT
ECOLOGICAL AREAS (SEA)



POTENTIAL BLUELINE STREAMS





These choke points represent areas where wildlife movement is severely restricted due to surrounding development. These choke points will influence the numbers and types of species moving into and through the City of Calabasas. The more choke points, the more the movement overall is restricted. The City of Calabasas needs to identify other potential choke points and plan for avoidance or minimization of increasing development around these choke points.

In response to the concerns regarding the loss of habitat linkages, the City has identified three linkages within the city limits that are slated for preservation. These three areas are as follows (Foundation Planning Document for the City of Calabasas, 1992):

The links between the Malibu Creek State Park, across Las Virgenes Road through Las Virgenes Water District land across the Ventura Freeway into Crummer Canyon and on into the Ahmanson Ranch property in Ventura County. This linkage has been the subject of the most intensive negotiation and preservation efforts.

This linkage is critical for the City of Calabasas because it provides for wildlife movement from the maritime and scrub habitats of the coastal areas of Malibu through the coastal sage scrub, chaparral, and oak woodland habitats of the southern section of Calabasas through to the hilly scrub habitats of Ventura County. This linkage connects State park lands southwest of Calabasas with Los Angeles County designated Significant Ecological Area lands within the City to new national park land in Ventura County.

The links between Malibu Creek State Park and part of the Agoura Hills into Liberty Canyon. Liberty Canyon is now a part of the Santa Monica Mountains National Recreation Area to the north. The City is dedicated to working with all concerned agencies and groups to assure the preservation of this linkage.

This linkage is important because it connects the maritime and scrub habitats of the Malibu coast with the hilly scrub habitats of Ventura County. This linkage will connect State park lands with Liberty Canyon. Liberty Canyon will become part of the Santa Monica Mountains National Recreation Area to the north. Therefore, an important link for wildlife movement between these two large wildlife areas will be maintained.

The links running east - west between Malibu Creek State Park and Topanga State Park. There is presently an almost continuous connection of state and national lands between the two parks.

This linkage is important because it provides for wildlife movement from the maritime and scrub habitats of the coastal areas of Malibu through to the coastal sage scrub and chaparral habitats of the City's General Plan study area. This linkage provides an additional connection from Malibu State Park to the hilly areas of the City's General Plan study area through to Topanga State Park. This linkage passes through an almost continuous connection of State or nationally owned lands and is critical to maintaining the wildlife diversity of both parks. Constriction by future development will further impact this critical linkage.

SENSITIVE RESOURCES AND SENSITIVE SPECIES

Sensitive resources are those plants, animals, and habitats occurring or potentially occurring in the General Plan study area, which are endangered, threatened, rare or declining rapidly at a local, regional, State or national level. Legal protection for these resources varies widely, from the comprehensive protection extended to endangered species to no legal status at present. Definitions of the legal status categories are provided in Appendix B. A complete description of the sensitive biological resources (i.e., plant and wildlife species) is provided in Appendix B.

Sensitive biological resources occur throughout the Calabasas area. Both sensitive habitats and sensitive species, including listed and non-listed species, occur primarily in the undeveloped areas both inside and outside of the Los Angeles County Significant Ecological Areas (SEAs; see subsequent section).

Sensitive Plant Communities

Plant communities as yet have no legal protection, with the exception of wetland and riparian habitats. Therefore, there is no standard classification or rating of sensitivity for plant communities. However, most wildlife agencies, biologists and environmentalists acknowledge that certain plant communities (wildlife habitats) are more sensitive to loss or have undergone greater loss than others and that therefore, they require special consideration in environmental documents.

The following plant communities have been identified as sensitive:

- Coastal sage scrub
- California walnut woodland
- Oak woodland (both coast live oak and valley oak)
- Coast live oak riparian forest
- Southern sycamore-alder riparian woodland
- Small riparian areas (including seeps, springs, etc.)
- Riparian woodland
- Riparian scrub.

These communities are considered sensitive because they have undergone and continue to undergo decline and/or degradation due to development.

Sensitive Species

The sensitive plant and animal resources found in the Calabasas General Plan study area are the following:

- San Fernando Valley spineflower
- Santa Monica Mountains dudleya
- Many-stemmed dudieya
- Blochman's dudleya
- Braunton's milkvetch
- Santa Susana tarweed
- Lyon's pentachaeta
- Southwestern pond turtle
- Coastal western whiptail
- San Diego horned lizard
- Coastal patch-nosed snake
- San Bernardino ringneck snake
- San Diego mountain kingsnake
- Two-striped garter snake
- Black-shouldered kite
- Northern harrier
- Sharp-shinned hawk
- Cooper's hawk
- Swainson's hawk
- Golden eagle
- Merlin
- Prairie falcon
- Peregrine falcon
- Yellow-billed cuckoo
- Burrowing owl
- Long-eared owl
- Willow flycatcher
- Bank swallow
- California horned lark

- Coastal cactus wren
- California gnatcatcher
- Loggerhead shrike
- Least Bell's vireo
- Yellow-breasted chat
- California yellow warbler
- Purple martin
- Southern California rufous-crowned sparrow
- Tricolored blackbird
- Bell's sage sparrow
- Summer tanager
- San Diego black-tailed jackrabbit
- Los Angeles pocket mouse
- Southern grasshopper mouse
- San Diego desert woodrat
- Pallid bat
- Townsend's big-eared bat
- California mastiff bat
- Valley oak ant
- Santa Monica Mountains hairstreak
- Santa Monica shieldback katydid
- Shedding primrose
- Wind poppy
- Monolopia
- Rabbitbrush
- Thread stem
- Small-flowered fiddleneck
- Hind's willow
- Prince's plume
- Big squirreltail
- Monarch butterfly
- Santa Monica Mountains band-winged grasshopper

- Coast Range newt
- Silvery legless lizard
- Rock wren
- Grasshopper sparrow
- Ringtail
- Badger
- Long-tailed weasel
- Mountain lion

Detailed descriptions of these species are presented in Appendix B.

LOS ANGELES COUNTY SIGNIFICANT ECOLOGICAL AREAS (SEAS)

Los Angeles County Significant Ecological Areas (SEAs) are areas that have been identified by the County of Los Angeles Significant Ecological Area Technical Advisory Committee as containing unique or unusual species assemblages, or areas of habitat that are rapidly declining in the Los Angeles County area. The Los Angeles County SEAs were set up to protect a special or sometimes unique collection of habitats and species from loss due to encroachment and human disturbances. However, the Los Angeles County SEAs are not intended to function as preservation areas in isolation. Additional preservation efforts will be required for those sensitive species and habitats occurring within the City of Calabasas but outside the Los Angeles County SEAs. The Los Angeles County SEA Nos. 5, 9, and 12 are located within the city limits and general Plan study area and the Los Angeles County SEAs No. 6 and 7 are adjacent to the General Plan study area limits. The Los Angeles County SEAs are indicated on Figure IV-1.

Los Angeles County SEA No. 5, Malibu Canyon and Lagoon, is described as an area that contains the only lagoon in Los Angeles County. The presence of a perennial stream which connects the dry interior mountain areas with the coastal zone across a sharp relief. This connection is unique to the Santa Monica Mountains, and allows for a unique and diverse biota in the region. The perennial stream in Malibu Canyon supports oak and riparian woodland with black cottonwood and leather-leaf ash trees. Malibu Canyon continues to support many wildlife, including mountain lion and golden eagles, despite declining populations over much of the Santa Monica Mountains. The riparian habitat provides resting and feeding areas for birds migrating along the coast. In addition, Malibu Creek is the only watercourse in southern California where steelhead continue to run and spawn. The lagoon at the mouth of the canyon provides two major plant communities, coastal salt marsh and coastal strand, that are declining along the coast. These habitats provide an important bird refuge for seasonal migrants. The lagoon has undergone serious degradation resulting from intensive recreational use. The Los Angeles County SEA No. 5 is located to the southwest of the study area slightly overlapping into the study area near Las Virgenes Road and Piuma Road.

The Los Angeles County SEA No 9, Cold Creek, is a relatively undisturbed natural sandstone basin found in the southern portion of the study area. The floor of the valley is steep, with springs and a perennial stream, Cold Creek. The year-round surface water, which is uncommon in Southern California, supports an unusually diverse flora. The extreme range in physical conditions, from wet streambed to dry rocky ridges makes the area a showplace for native vegetation. Pristine stands of chaparral, southern oak woodland, coastal sage scrub and riparian woodland are all found in the area. Several plant species that are uncommon to the general region are found here. Those include stream orchis (Epipachis giganea), red mimulus (Mimulus cardinalis), Humboldt lily (Lilium humboldtii var. ocellatum), big-leaf maple (Acer macrophyllum), and red shank (Fraxinus dipetala), reaching 40 feet in height, is a unique botanical oddity. This shrub species has a normal maximum height of 15 to 20 feet.

Due to its many outstanding botanical features, the area serves an integral role as part of the instructional program for many academic institutions, as well as a site for nature study and scientific research.

The Los Angeles County SEA No. 12, Palo Comado Canyon, was identified by the County of Los Angeles as one of the last examples of southern oak woodland savannah of any significant size in the County. It is composed of 2,760 acres divided into two distinct sections by a narrow constriction near the Ventura Freeway at Brents Junction (Las Virgenes Creek). The northern section includes portions of Palo Comado and Cheseboro Canyons in the Simi Hills. This section includes an extensive grassland community, patches of coastal sage scrub, and large areas of oak woodland and savannah with valley oak, coast live oak and walnut woodland. In the past, grazing has heavily impacted the few remaining native grasses and forbs, and most have been replaced with Eurasian species. The trees support an abundant population of raptorial birds and woodpeckers, and a variety of small mammals.

The section south of the freeway includes the McCoy Canyon, where slopes drain to the Las Virgenes Creek, and a series of north-south trending canyons and hills in the southcentral area. The vegetation in this section is similar to that in the north but includes orchards with citrus, plums and avocados, and has less extensive savannah type vegetation.

The Los Angeles County SEA No. 6, Las Virgenes, is located just west of the General Plan study area boundary in the hilly terrain west of Liberty Canyon. This area contains a number of plants species that are common throughout the interior areas of southern California, but are only found in this section of the Santa Monica Mountains. This area is relatively undisturbed, and does not have any significant development. The surrounding vegetation consists of coastal sage scrub and chaparral.

The Los Angeles County SEA No. 7, Hepatic Gulch, although located outside of the General Plan study area is close to, and potentially influenced by activities within the City of Calabasas. The Los Angeles County SEA is small, but possesses a vegetative association with many uncommon species and unique ecological relationships. The soil is constantly slumping in small patches scattered throughout the area, creating new surfaces for growth. This results in a complex patchwork of habitats, with a variety of different and unrelated habitats in juxtaposition. It is common, for example, to observe moisture dependent ferns and mosses growing in damp soil next to xerophytic, or drought-tolerant species, on dry hillsides.

OTHER BIOLOGICAL ISSUES

Regulatory Processes/Permitting Issues/Mitigation Compliance

There are at least five and possibly six permits or processes that will influence the progress of development in the City of Calabasas. Two of the actions involve the federal government, two the state government, and one a local ordinance. The sixth permit is administered by the State Water Resources Quality Control Board. These six permits/processes include: U.S. Army Corps of Engineers Section 404 permit; California Department of Fish and Game 1601/1603 Streambed Alteration Agreement; the Federal Endangered Species Act Section 10(a) permit, the State Endangered Species Act Section 2081 permit; the State Water Resources Quality Control Board water quality certification; and the City of Calabasas' Oak Tree Ordinance. These permits/processes are described in the following paragraphs. In addition, the multi-species approach to habitat preservation is also discussed. A complete discussion of these permits/processes and mitigation compliance may be found in Appendix B. A summary of the permits/processes follows.

Wetland/Jurisdictional Determination/Streambed Alteration

Drainages, streambeds, ponds and similar areas such as Las Virgenes Creek are subject to consideration as important resources under the jurisdiction of both the Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG). The determination of jurisdiction can be independent of the plant communities associated with these areas. Because proposed development within Calabasas city limits or General Plan study area may result in modifications to these areas, it may be subject to review by these agencies.

Wetlands are afforded special emphasis under both the State and federal programs. Wetlands are considered by the Corps and the EPA to be "special aquatic sites." Both CDFG and the U.S. Fish and Wildlife Service have strict policies regarding mitigation of wetland areas.

Because of the limited wetland and riparian resources in Southern California, the Corps and CDFG require compensatory mitigation for virtually every permit or agreement issued where unavoidable impacts to jurisdictional waters will occur. The level of mitigation required is generally based on the following factors:

- the quality of the resource being impacted;
- the difficulty of providing "in kind" mitigation;
- whether the mitigation is accomplished on or off site; and
- whether there is any time lag between when the impact occurs and when the created habitat is functional.

While a basic replacement ratio of 1:1 is occasionally adequate, especially for relatively easy to replace habitats such as cattail marshes, ratios of 2:1 or 3:1 for more complex habitat types are not uncommon.

Mitigation has been required at 2:1 ratios or greater for on-site mitigation of essentially dry washes. Recently, CDFG has required 3:1 replacement on essentially every Streambed Alteration Agreement.

Mitigation for impacts to wetlands is accomplished through obtaining appropriate permits from the Corps and CDFG. These permits include a Corps Section 404 Nationwide Permit (for small wetland areas), a Corps Section 404 Individual Permit (for larger wetland areas), and a CDFG Notification of Streambed Alteration. Specific requirements for these permits are described in Appendix B.

Army Corps of Engineers. Under Section 404 of the Clean Water Act, the Corps of Engineers (Corps) regulates discharges of dredged or fill material into waters of the United States, including wetlands. These waters include essentially any drainage course with defined banks or other evidence of flow, and other wetlands and non-wetland bodies of water that meet specific criteria as a jurisdictional wetland.

Therefore, any alteration to waters occurring in the study area that meet jurisdictional wetland criteria may be required to undergo review for a Section 404 Permit from the Corps. The Corps is thus responsible for reviewing the 404 Permits for environmental impacts of the proposed dredge or fill material.

California Department of Fish and Game. The CDFG, through provisions of the State of California Administrative Code (Section 1600 et al.), is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFG.

The CDFG policies for protection of stream resources are implemented through the 1601/1603 Streambed Alteration Agreement. The CDFG requires notification of any proposed streambed alteration as the result of a project. The 1601/1603 Notification may result in a 1601/1603 Agreement, which can request mitigation in the form of compensation for habitat loss.

Federal and State Endangered Species Acts

The Federal Endangered Species Act was passed to provide protection for species listed as endangered or threatened by the U.S. Fish and Wildlife Service. Endangered species are those that are threatened with immediate extinction if no protective actions are taken. Threatened species are those that will become endangered if no protective actions are taken. All federal government agencies, including the U.S. Fish and Wildlife Service are required to consider federally listed species and potential impacts to them that may result from any action by the agency. Such actions include use of federal monies and lands or actions, such as the issuance of permits.

All other public and private sector agencies and landowners are required to consider federally listed species when making decisions on land development and changes in land use. The only exemption is for federally listed plant species, which are not currently protected on private property.

Section 10(a) is that section of Federal Endangered Act that permits the incidental taking of a federally listed species. Incidental taking is defined as a "taking that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Section 10(a) permits are issued by the Secretary of the Interior. Before the Secretary will issue the permit, the applicant for the Section 10(a) permit must submit a detailed conservation plan.

The California Endangered Species Act was passed to provide protection for species that occur within the State boundaries that are listed as endangered, threatened or rare. The first two categories are similar to the Federal Endangered Species Act categories, while the rare category is similar to threatened but is applied only to plant species.

All public and private sector agencies and landowners are required to consider State listed species when making decisions on land development and changes in land use, in much the same way as a federal Section 7 Consultation. Local agencies and private parties must obtain authorizations for "take" under Section 2081 of the California Endangered Species Act.

Section 2081 is that section of California Endangered Species Act that permits the importation, exportation, taking, or possession of a state listed species and also candidate species (proposed for listing). A Section 2081 permit is issued by the CDFG. Section 2081 limits importation, exportation, take, or possession only for scientific, education or management purposes. This provision has been extended to allow take of species for individual projects, presumably under the management provision. Unfortunately, CESA does not precisely define the conditions under which issuance of a permit or Memorandum of Understanding is allowed for these projects. However, experience has shown that the information required for the federal Section 10(a) permit is also requested by the CDFG. Therefore, the type of information needed under Section 2081 is similar to that supplied for a Section 10(a) permit.

Water Quality

The State Water Resources Quality Control Board is responsible for permitting actions relating to water quality control issues. The State Water Resources Quality Control Board has the authority to issue a water quality certification prior to issuance of any Nationwide 404 Permits by the Corps.

Oak Tree Ordinance

The City originally adopted the County's oak tree ordinance (Sec. 22.56) which has since been superseded by City Ordinance No. 92-39. The new ordinance requires procurement of an oak tree permit prior to removal, alteration or transplant of trees conforming to the criteria in the ordinance. A number of specific requirements are outlined in the ordinance which apply to individual trees, and to a limited extent, tree canopies, as opposed to types of trees or communities. The intent of the ordinance is to extend protection to oak trees within the City, and avoid their removal, alteration or transplant, unless replacement is granted in conjunction with the oak tree permit conditions.

Multi-Species Preservation

Many governmental agencies have initiated efforts to protect multiple species within planning areas in an effort to minimize the preparation of successive documents each time a species is listed. These multiple species documents also provide for protection of candidate or sensitive resources that are not yet listed but may still warrant protection. A multi-species approach towards habitat preservation can effectively postpone, or ultimately eliminate, the need to list individual species that are candidates for State or federal listing. In addition, to the extent that preservation efforts conform to the State and federal guidelines for habitat conservation, a multi-species plan can be used as a basis for obtaining permits from the CDFG and U.S. Fish and Wildlife Service where a species is officially listed. Similarly, a multi-species plan can form the ground work for pre-listing agreements with the agencies, when individual development projects desire other processing alternatives. In Calabasas, although there are few known species listed by the CDFG and U.S. Fish and Wildlife Service, many are candidate species which could benefit by a multi-species planning effort. Currently, however, there are no such plans being undertaken in or around Calabasas.

D. WATER RESOURCES

SURFACE WATER RESOURCES AND WATER QUALITY

Four regional or subregional watersheds extend through the Calabasas study area which collect and ultimately convey runoff to the Pacific Ocean. These watersheds include the Las Virgenes Creek Watershed, the Medea Creek Watershed, the Arroyo Calabasas Watershed and the Topanga Canyon Watershed (see Figure IV-2).

Las Virgenes Creek Watershed

Las Virgenes Creek is a dominant drainage course of both the Las Virgenes Watershed and the regional Malibu Creek Watershed (the Las Virgenes Watershed is included within the Malibu Creek Watershed). Las Virgenes Creek ultimately joins with Malibu Creek to the south of the study area and flows into the Pacific Ocean.

The Las Virgenes Creek Watershed comprises approximately 60 percent of the study area. In addition to Las Virgenes Creek, this watershed includes the Stokes Canyon and Cold Creek Canyon tributaries. Malibu Creek extends into the City of Calabasas from Ventura County to the north, and travels through the City in a north-south direction near the western edge of the study area. Both Stokes Canyon and Cold Creek Canyon intersect Malibu Creek to the south of the city limits. These tributaries flow from northeast to southwest and are principally contained within the General Plan study area.

Medea Creek Watershed

Portions of the subregional Medea Creek Watershed, also contained in the regional Malibu Creek Watershed, drain the northwestern corner of the study area. Cheseboro Canyon, a tributary basin contained within the Medea Creek Watershed, is the only portion of the watershed contained within the study area boundaries. This tributary comprises approximately five percent of the study area. Both Cheseboro Creek and the adjacent Palo Comado Canyon (not contained within the study area) flow into Medea Creek which ultimately intersects with Malibu Creek prior to discharging into the Pacific Ocean.

Arroyo Calabasas Watershed

The subregional Arroyo Calabasas watershed flows into the regional Los Angeles River Watershed to the northeast. The Arroyo Calabasas Watershed comprises approximately 30 percent of the study area. In the study area, two tributaries are contained in the Arroyo Calabasas Watershed. These are the McCoy Canyon and Dry Canyon tributaries. Both tributaries occupy a significant portion of the eastern portion of the City of Calabasas and drain to the northeast.

Topanga Watershed

This watershed is comprised of two smaller tributary basins which extend along Old Topanga Canyon Road and Topanga Canyon Road. The watershed is located along the eastern portion of the study area, almost entirely outside of the corporate limits but within the study area.

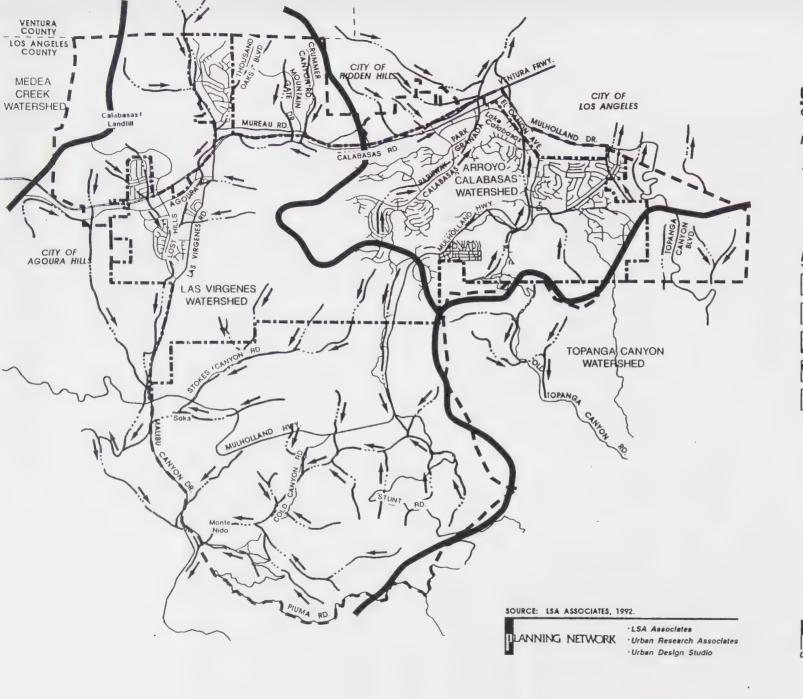




FIGURE IV-2

AREA WATERSHEDS

LEGEND

CITY

CITY LIMITS

SPHERE OF INFLUENCE

DRAINAGE COURSES

.. L BRAINAGE COURSES

WATERSHED BOUNDARY

DIRECTION OF FLOW





Surface Water Quality

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants in stormwater to water of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System permit. The 1987 amendments to the Clean Water Act added Section 402(p) which establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System program. On November 16, 1990, EPA published final regulations that establish requirements for applications for stormwater discharge permits for specified categories of industries. Construction activities of five acres or more are defined in the regulations as an industrial activity.

The City of Calabasas and 19 other cities are co-permittees with the County of Los Angeles on a region-wide National Pollutant Discharge Elimination System permit which has been obtained from the Regional Water Quality Control Board. The National Pollutant discharge Elimination System permit has been issued to comply with the Storm Water Quality Act of 1987 and is a federally mandated requirement with the goal to improve storm water runoff water quality. The City, the co-permittees, and the County of Los Angeles attend monthly meetings to maintain involvement with the NPDES process and monitor its progress.

The National Pollutant Discharge Elimination System permits fall into three categories: 1) Municipal, 2) Commercial/Industrial, and 3) Construction. The City and County permit falls into the Municipal permit category which outlines specific responsibilities and requirements to be addressed in a five year period. Three years have elapsed since issuance of the permit.

Principally, the City of Calabasas is responsible for their own storm drain system which includes local storm drain facilities and roadway curbs and gutters. Detailed permit provisions require that the City develop Best Management Practices at three levels to reduce pollution in runoff in the storm drain system. The City submitted the first level Best Management Practices (early action Best Management Practices which include erosion control, street sweeping, educational programs, etc.) and second level Best Management Practices (additional Best Management Practices which include more aggressive practices, such as adoption of local ordinances, and defining industrial development specifications for pre- and post-construction conditions) to the County, who has forwarded the Best Management Practices to the State for consideration and approval. To date, the State has not granted their approval. It is expected that the approval may occur in the fourth year of the permit. Additional actions await State approval of the first and second level Best Management Practices. Future city action will ultimately be needed to reflect the State's determination of Best Management Practice adequacy.

The City is now in the process of accelerating their Best Management Practice implementation process through identification of potential funding and staffing requirements necessary to support continued work with the National Pollutant Discharge Elimination System program. Thus far, the City has implemented the following Best Management Practices:

- Storm drain and catch basin cleaning program;
- Weekly street sweeping program; and
- Inventory of storm drain systems.

GROUNDWATER FLOW AND RECHARGE

The type of geologic formations and watershed conditions in the Calabasas region do not provide adequate opportunity for subsurface groundwater storage. As illustrated in Figure IV-2, the range of Younger Alluvium formation (i.e., that formation where significant groundwater conditions occur) is confined to the bottoms of drainage courses and is limited in area. The aquifers present in these shallow alluvium areas are limited to approximately 50 feet in depth (average). Although several water wells are currently operational within the study area, the yield is not reliable, and provides a limited source to rural properties. According to the Los Angeles County Department of Public Works Hydrologic Report, no groundwater basins are identified for the study area, which accounts for the need to import potable water from the Metropolitan Water District. The Hydrologic Report is prepared and updated every two years by the County for purposes of providing data to the public on hydrologic conditions. The report includes data and discussions including but not limited to groundwater levels and storage, water retained behind dams, quantities of water spread for recharge, amount of precipitation, erosion control, water quality, water conservation, evaporation and runoff.

As mentioned, the Younger Alluvium provides little storage of groundwater. As a result, there are no groundwater recharge opportunities within the study area. Nuisance runoff from landscape irrigation often aggravates the thin storage capacity in the bottoms of drainage courses resulting in localized shallow groundwater conditions and surface flow.

E. MINERAL RESOURCES

SURFACE MINING AND RECLAMATION ACT OF 1975

In response to the problem of conflicting land use and the essential need for mineral extraction, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA) of 1975. SMARA requires the State Geologist to classify, according to the presence or absence of significant mineral deposits, certain areas of the State subject to urban expansion or other irreversible land uses incompatible with mining operations.

The State Mining and Geology Board, upon receipt of the classification information from the State Geologist, consults with the appropriate lead agencies and other interested parties. After this consultation, the Board may designate identified mineral deposits in classified areas as being of statewide or regional significance. The objective of the classification and designation process is to assist local governments in preserving essential mineral resources that might otherwise be unavailable when needed.

According to State law, following formal designation by the Board of an area as a resource sector, the affected jurisdiction is required to establish mineral resource management policies in the General Plan that: (1) recognize the mineral information classified by the State Geologist and transmitted by the board; (2) assist in the management of land uses which affect areas of statewide and regional significance; and (3) emphasize the conservation and development of the identified mineral deposits.

RESOURCE CLASSIFICATION/DESIGNATION IN CALABASAS

The City of Calabasas lies on the northern side of the Santa Monica Mountains in Los Angeles County. Due to the fact that much of the City's area is currently undeveloped, the potential extraction of any valuable mineral resources has not yet been substantially precluded. In order to determine the presence or absence of valuable mineral resources (aggregate resource only) within city boundaries, a copy of the California Department of Conservation's (Division of Mines and Geology) Special Report No. 143 was reviewed.

This 1979 report, entitled *Mineral Land Classification of the Greater Los Angeles Area* has the stated objective to classify land in the Los Angeles area into Mineral Resource Zones based on 1978 Guidelines adopted by the California State Mining and Geology Board. The classification project (Slated to be completed by 2010) assists the State Mining and Geology Board, as mandated by the provisions of SMARA, in designating lands that are most needed for their mineral content.

According to Special Report No. 143, the vast majority of the City is included in the San Fernando Valley Production-Consumption Region, and has been classified as Mineral Resource Zone (MRZ) 3. MRZ 3 areas contain mineral deposits for which the significance cannot be evaluated from available data. In addition to the MRZ-3 classification, a small eastern portion of the City has been designated MRZ-1. This zone is defined as containing areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that the presence of mineral deposits is unlikely. The State, under SMARA, does not require protection of MRZ-1 areas.

That portion of the study area which lies within the National Park Service's Santa Monica Mountain National Recreation Area has not been classified by the State. According to Mr. John Alforse of the California Department of Mines and Geology, the past State policy was to avoid classification of mineral resources within federal park areas because the intent of SMARA was to provide local decision makers information with which to protect known valuable mineral reserves. Since local jurisdictions do not have the authority to regulate land uses on federal land, such lands were not included in the classification process.

However, as part of an ongoing update to the State's classification/designation program, areas previously not considered for classification are now being examined. Because the State is not expressly prohibited from classifying federal lands, there is a reasonable potential for some areas within the Santa Monica Mountain National Recreation Area (including areas also within the project boundaries) to be classified and/or designated in the future. The City's responsibilities under SMARA relative to the potential future classification of federal lands would depend upon the particular classification (i.e., MRZ-1, 2, 3, or 4). The City's responsibilities based upon the known areas of classification are discussed below.

According to Section 2762 of SMARA, once lands have been classified as MRZ-3 the affected lead agency must then, in accordance with State policy, establish mineral resource protection policies to be incorporated into its General Plan which will:

- Recognize mineral information classified by the State Geologist and transmitted to the State Mining and Geology Board.
- Assist in the management of land uses which affect areas of statewide and regional significance.
- Emphasize the conservation and development of identified mineral deposits.

When developed by the lead agency, such proposed mineral resource protection policies must be submitted to the State Mining and Geology Board for review and comment prior to adoption.

Further, Section 2762(2)(e) of SMARA states that prior to permitting a use which would threaten the potential to extract minerals in an area classified as MRZ-3, the lead agency may require the preparation of an evaluation of the area in order to determine the significance of the mineral deposit located therein. The results of the evaluation must then be transmitted to the State Geologist and the State Mining and Geology Board.





